



March 23, 2012

Brad Davis
Zia Engineering & Environmental
755 S Telshor Blvd Ste F-201
Las Cruces, NM 88011
TEL: (575) 993-6824
FAX (575) 532-1587
RE: HELSTF Construction Landfill

Order No.: 1203116

Dear Brad Davis:

DHL Analytical received 9 sample(s) on 3/13/2012 for the analyses presented in the following report.

There were no problems with the analyses and all data met requirements of DoD QSM Ver 4.2 and NELAC except where noted in the Case Narrative. All non-NELAC methods will be identified accordingly in the case narrative and all estimated uncertainties of test results are within method or EPA specifications.

If you have any questions regarding these tests results, please feel free to call. This report shall not be reproduced except in full without the written approval of DHL Analytical, Inc. Thank you for using DHL Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "John DuPont", is written over a white background.

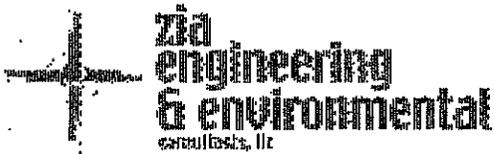
John DuPont
General Manager

This report was performed under the accreditation of the State of Texas & DoD Laboratory Certification Number: T104704211-11-7 & DoD ELAP #ADE-1416 v2



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755 S. Tebbor Blvd. Ste. F-201
 Las Cruces, NM 88011
 575-532-1526
 575-532-1587 F

#1203114

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.		PROJECT NAME			NO. OF CONTAINERS	ANALYSIS REQUESTED								REMARKS
SAMPLER'S SIGNATURE						TOC	VOCS	GR0	DRO	SVOCs	Total Metals	Dissolved Metals	Anions	
DATE	TIME	SAMPLE ID	MATRIX	LAB NO.										
3-12-12	1020	HLSF-3839-HMW-035-0312	Water		10	X	X	X	X	X	X	X		
3-12-12	1020	HLSF-3839-HMW-135-0312	Water		10	X	X	X	X	X	X	X		
3-12-12	1020	HLSF-3839-HMW-TB-2-0312	Water		2		X						trip blank	

PROJECT INFORMATION	SAMPLES RECEIVED	1. RELINQUISHED BY: (SIGNATURE) <i>Bradley T. Davis</i> (PRINTED NAME) 3-12-12 1700 RECEIVED BY: (SIGNATURE) <i>Bradley T. Davis</i> (TIME/DATE) 3/12/12 1700	2. RELINQUISHED BY: (SIGNATURE) <i>Debra</i> (PRINTED NAME) 3/13/12 1150 RECEIVED BY: (SIGNATURE) <i>Debra</i> (TIME/DATE) 3/13/12 1150	3. RECEIVED BY LAB: (SIGNATURE) (PRINTED NAME) (COMPANY) (TIME/DATE)
PROJECT MANAGER <i>Brad Davis</i>	TOTAL NO. OF CONTAINERS			
SHIPPING ID NO.	CHAIN OF CUSTODY SEALS	40		
VIA: <i>Fed EX</i>	GOOD CONDITION C HILLED <i>Number 57</i>	3.00	SPECIAL INSTRUCTIONS / COMMENTS: <i>See Attached Analyte List</i>	
	CONFORMS TO RECORD			



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 575-532-1581 f

1203114

CHAIN OF CUSTODY RECORD

PAGE 1 OF 1

PROJECT NO.		PROJECT NAME			NO. OF CONTAINERS	ANALYSIS REQUESTED							REMARKS
SAMPLER'S SIGNATURE		SAMPLE ID				TOC	VOCs	GRO	DRD	SVOEs	Total metals	Dissolved metals	
DATE	TIME	SAMPLE ID	MATRIX	LAB NO.									
07 08 09	3-12-12 1415	HLSF-3839-RB-001-0312	Water		16	X	X	X	X	X	X	X	
	3-12-12 1540	HLSF-3839-HMW-032-0312	Water		16	X	X	X	X	X	X	X	
	3-12-12 1540	HLSF-3839-HMW-TB ³ -0312	Water		2		X						
<p>Note: rinsate blank sample - dissolved metals + Anions not field filtered or preserved. Please filter and preserve at lab.</p>													

PROJECT INFORMATION		SAMPLES RECEIVED	1. RELINQUISHED BY: (SIGNATURE) <i>Bradley T. Davis</i>	2. RELINQUISHED BY: (SIGNATURE) <i>Jed up</i>	3. RECEIVED BY LAB: (SIGNATURE)
PROJECT MANAGER <i>Brad Davis</i>	TOTAL NO. OF CONTAINERS 1700		(PRINTED NAME) Bradley T. Davis	(PRINTED NAME) 3-12-12 1700	(PRINTED NAME)
SHIPPING ID NO. <i>440</i>	CHAIN OF CUSTODY SEALS <i>2.1</i>		RECEIVED BY: (SIGNATURE) <i>Jed up</i>	RECEIVED BY: (SIGNATURE) <i>Jed up</i>	(COMPANY)
<i>via FedEx</i>	GOOD CONDITION/C HILLED <i>Shunts 2</i>		(TIME/DATE) 3/14/12 1700	(TIME/DATE) 3/13/12 1150	(TIME/DATE)
CONFORMS TO RECORD		SPECIAL INSTRUCTIONS/ COMMENTS: <i>See Attached Analyte List.</i>			



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#1203116

CHAIN OF CUSTODY RECORD

PAGE 2 OF 1

PROJECT NO.		PROJECT NAME			NO. OF CONTAINERS	ANALYSIS REQUESTED							REMARKS
SAMPLER'S SIGNATURE						TOCs	VOCs	GRO	DRO	SVOCs	Total Metals	Dissolved Metals	
DATE	TIME	SAMPLE ID	MATRIX	LAB NO.									
		<i>HELSTF Construction Land Fill</i>											
<i>Bradley T. Davis</i>													
3-12-12	1210	HLSF-3839-HMN-TB-2-0312	Water		2		X						
3-12-12	1210	HLSF-3839-HMN-034-0312	Water		16	X	X	X	X	X	X	X	
3-12-12	1325	HLSF-3839-HMN-059-0312	Water		16	X	X	X	X	X	X	X	
PROJECT INFORMATION					1. RELINQUISHED BY: (SIGNATURE)		2. RELINQUISHED BY: (SIGNATURE)		3. RECEIVED BY LAB: (SIGNATURE)				
PROJECT MANAGER					<i>Bradley T. Davis</i>		<i>Jedry</i>						
SHIPPING ID NO.					(PRINTED NAME) 3-12-12		(PRINTED NAME) 3/12/12 1150		(PRINTED NAME)				
TOTAL NO. OF CONTAINERS					<i>1700</i>		<i>1700</i>		(COMPANY)				
CHAIN OF CUSTODY/SEALS					RECEIVED BY: (SIGNATURE)		RECEIVED BY: (SIGNATURE)		(TIME/ DATE)				
<i>429</i>					<i>Jedry</i>		<i>Jedry</i>		<i>3/13/12 1150</i>				
GOOD CONDITION/CHECKED					(TIME/ DATE) 3/12/12 1000		(TIME/ DATE) 3/13/12 1150		(TIME/ DATE)				
<i>24</i>													
CONFORMS TO RECORD					SPECIAL INSTRUCTIONS/COMMENTS: <i>See Attached Analyte List</i>								
WAC: <i>Fed EX</i>													

PLEASE USE BALL POINT PEN

DISTRIBUTION: WHITE - PROJECT FILES; YELLOW - LAB; PINK - FIELD COPY

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Zia Engineering

Origin ID: LRUA



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Ship Date: 12MAR12
ActWgt: 50.0 LB
CAD: 102287640/MNET3250

Dims: 28 X 20 X 18 IN

SHIP TO: (512) 388-8222

BILL SENDER

John Dupont
DHL Analytical
2300 DOUBLE CREEK DR

ROUND ROCK, TX 78664

Delivery Address Bar Code



Ref # LCS-09-015 BG 0033
Invoice #
PO # Brad Davis
Dept #

1 of 3

TUE - 13 MAR A1
PRIORITY OVERNIGHT

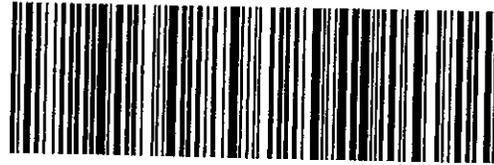
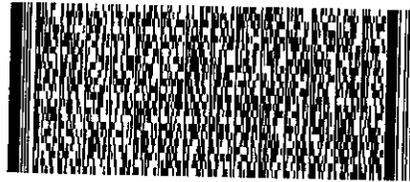
TRK# 7981 6012 9373

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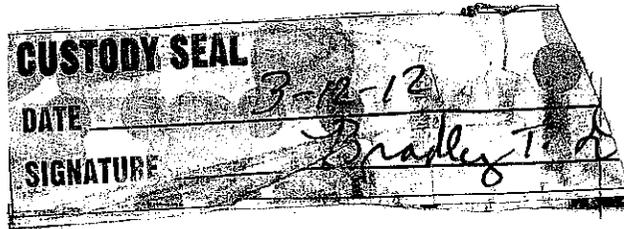
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0263

Mstr# 7981 6012 9373

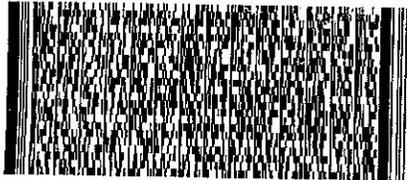
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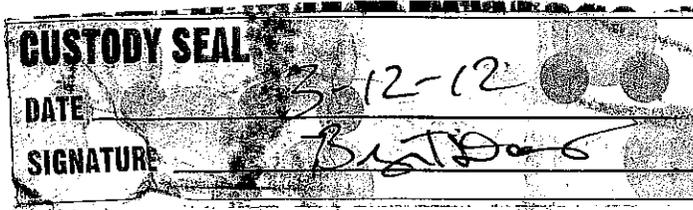
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Act/Wgt: 50.0 LB
CAD: 102287640/NET3250
Dims: 28 X 20 X 18 IN

Delivery Address Bar Code



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PO # Brad Davis
Dept #

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TUE - 13 MAR A1
PRIORITY OVERNIGHT

MPS# 7981 6012 9502

0263

Mstr# 7981 6012 9373

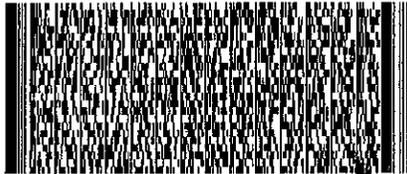
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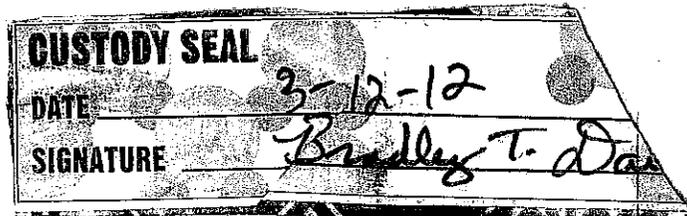
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Sample Receipt Checklist

Client Name Zia Engineering & Environmental

Date Received: 3/13/2012

Work Order Number 1203116

Received by JB

Checklist completed by: [Signature] 3/13/2012
Signature Date

Reviewed by [Initials] 3/13/2012
Initials Date

Carrier name: FedEx 1day

- Shipping container/cooler in good condition? Yes No Not Present
- Custody seals intact on shipping container/cooler? Yes No Not Present
- Custody seals intact on sample bottles? Yes No Not Present
- Chain of custody present? Yes No
- Chain of custody signed when relinquished and received? Yes No
- Chain of custody agrees with sample labels? Yes No
- Samples in proper container/bottle? Yes No
- Sample containers intact? Yes No
- Sufficient sample volume for indicated test? Yes No
- All samples received within holding time? Yes No
- Container/Temp Blank temperature in compliance? Yes No 3.6 °C, 2.4, 2.1
- Water - VOA vials have zero headspace? Yes No No VOA vials submitted
- Water - pH acceptable upon receipt? Yes No Not Applicable

Adjusted? NO Checked by [Signature]

Any No response must be detailed in the comments section below.

Client contacted _____ Date contacted: _____ Person contacted _____

Contacted by: _____ Regarding: _____

Comments: _____

Corrective Action _____

DHL Analytical, Inc.

Laboratory Review Checklist: Reportable Data

Project Name: HELSTF Construction Landfill		Date: 3/23/2012					
Reviewer Name: Angie O'Donnell		Laboratory Work Order: 1203116					
Prep Batch Number(s): See Prep Dates Report		Run Batch: See Analytical Dates Report					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
R1	OI	Chain-of-Custody (C-O-C)					
		1) Did samples meet the laboratory's standard conditions of sample acceptability upon receipt?	X				R1-01
		2) Were all departures from standard conditions described in an exception report?			X		
R2	OI	Sample and Quality Control (QC) Identification					
		1) Are all field sample ID numbers cross-referenced to the laboratory ID numbers?	X				
		2) Are all laboratory ID numbers cross-referenced to the corresponding QC data?	X				
R3	OI	Test Reports					
		1) Were all samples prepared and analyzed within holding times?	X				
		2) Other than those results < MQL, were all other raw values bracketed by calibration standards?	X				
		3) Were calculations checked by a peer or supervisor?	X				
		4) Were all analyte identifications checked by a peer or supervisor?	X				
		5) Were sample quantitation limits reported for all analytes not detected?	X				
		6) Were all results for soil and sediment samples reported on a dry weight basis?			X		
		7) Were % moisture (or solids) reported for all soil and sediment samples?			X		
		8) If required for the project, TICs reported?			X		
R4	O	Surrogate Recovery Data					
		1) Were surrogates added prior to extraction?	X				
		2) Were surrogate percent recoveries in all samples within the laboratory QC limits?	X				
R5	OI	Test Reports/Summary Forms for Blank Samples					
		1) Were appropriate type(s) of blanks analyzed?	X				
		2) Were blanks analyzed at the appropriate frequency?	X				
		3) Were method blanks taken through the entire analytical process, including preparation and, if applicable, cleanup procedures?	X				
		4) Were blank concentrations < MQL?		X			R5-04
R6	OI	Laboratory Control Samples (LCS):					
		1) Were all COCs included in the LCS?	X				
		2) Was each LCS taken through the entire analytical procedure, including prep and cleanup steps?	X				
		3) Were LCSs analyzed at the required frequency?	X				
		4) Were LCS (and LCSD, if applicable) %Rs within the laboratory QC limits?		X			R6-04
		5) Does the detectability data document the laboratory's capability to detect the COCs at the MDL used to calculate the SQLs?	X				
6) Was the LCSD RPD within QC limits (if applicable)?		X			R6-06		
R7	OI	Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Data					
		1) Were the project/method specified analytes included in the MS and MSD?	X				
		2) Were MS/MSD analyzed at the appropriate frequency?	X				R7-02
		3) Were MS (and MSD, if applicable) %Rs within the laboratory QC limits?		X			R7-03
4) Were MS/MSD RPDs within laboratory QC limits?	X						
R8	OI	Analytical Duplicate Data					
		1) Were appropriate analytical duplicates analyzed for each matrix?	X				
		2) Were analytical duplicates analyzed at the appropriate frequency?	X				
3) Were RPDs or relative standard deviations within the laboratory QC limits?	X						
R9	OI	Method Quantitation Limits (MQLs):					
		1) Are the MQLs for each method analyte included in the laboratory data package?	X				
		2) Do the MQLs correspond to the concentration of the lowest non-zero calibration standard?	X				
3) Are unadjusted MQLs included in the laboratory data package?	X						
R10	OI	Other Problems/Anomalies					
		1) Are all known problems/anomalies/special conditions noted in this LRC and ER?	X				R10-01
		2) Were all necessary corrective actions performed for the reported data?	X				
		3) Was applicable and available technology used to lower the SQL minimize the matrix interference affects on the sample results?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

DHL Analytical, Inc.

Laboratory Review Checklist (continued): Supporting Data

Project Name: HELSTF Construction Landfill		Date: 3/23/2012					
Reviewer Name: Angie O'Donnell		Laboratory Work Order: 1203116					
# ¹	A ²	Description	Yes	No	NA ³	NR ⁴	ER# ⁵
S1	OI	Initial Calibration (ICAL)					
		1) Were response factors and/or relative response factors for each analyte within QC limits?	X				
		2) Were percent RSDs or correlation coefficient criteria met?	X				
		3) Was the number of standards recommended in the method used for all analytes?	X				
		4) Were all points generated between the lowest and highest standard used to calculate the curve?	X				
		5) Are ICAL data available for all instruments used?	X				
		6) Has the initial calibration curve been verified using an appropriate second source standard?		X			S1-06
S2	OI	Initial and Continuing Calibration Verification (ICCV and CCV) and Continuing Calibration blank (CCB)					
		1) Was the CCV analyzed at the method-required frequency?	X				
		2) Were percent differences for each analyte within the method-required QC limits?		X			S2-02
		3) Was the ICAL curve verified for each analyte?	X				
		4) Was the absolute value of the analyte concentration in the inorganic CCB < MDL?		X			S2-04
S3	O	Mass Spectral Tuning					
		1) Was the appropriate compound for the method used for tuning?	X				
		2) Were ion abundance data within the method-required QC limits?	X				
S4	O	Internal Standards (IS)					
		1) Were IS area counts and retention times within the method-required QC limits?		X			S4-01
S5	OI	Raw Data (NELAC section 1 appendix A glossary, and section 5.12)					
		1) Were the raw data (for example, chromatograms, spectral data) reviewed by an analyst?	X				
		2) Were data associated with manual integrations flagged on the raw data?	X				S5-01
S6	O	Dual Column Confirmation					
		1) Did dual column confirmation results meet the method-required QC?			X		
S7	O	Tentatively Identified Compounds (TICs)					
		1) If TICs were requested, were the mass spectra and TIC data subject to appropriate checks?			X		
S8	I	Interference Check Sample (ICS) Results					
		1) Were percent recoveries within method QC limits?	X				
S9	I	Serial Dilutions, Post Digestion Spikes, and Method of Standard Additions					
		1) Were percent differences, recoveries, and the linearity within the QC limits specified in the method?		X			S9-01
S10	OI	Method Detection Limit (MDL) Studies					
		1) Was a MDL study performed for each reported analyte?	X				
		2) Is the MDL either adjusted or supported by the analysis of DCSs?	X				
S11	OI	Proficiency Test Reports					
		1) Was the lab's performance acceptable on the applicable proficiency tests or evaluation studies?	X				
S12	OI	Standards Documentation					
		1) Are all standards used in the analyses NIST-traceable or obtained from other appropriate sources?	X				
S13	OI	Compound/Analyte Identification Procedures					
		1) Are the procedures for compound/analyte identification documented?	X				
S14	OI	Demonstration of Analyst Competency (DOC)					
		1) Was DOC conducted consistent with NELAC Chapter 5C?	X				
		2) Is documentation of the analyst's competency up-to-date and on file?	X				
S15	OI	Verification/Validation Documentation for Methods (NELAC Chap 5)					
		1) Are all the methods used to generate the data documented, verified, and validated, where applicable?	X				
S16	OI	Laboratory Standard Operating Procedures (SOPs)					
		1) Are laboratory SOPs current and on file for each method performed?	X				

1 Items identified by the letter "R" should be included in the laboratory data package submitted to the TCEQ in the TRRP-required report(s). Items identified by the letter "S" should be retained and made available upon request for the appropriate retention period.

2 O = organic analyses; I = inorganic analyses (and general chemistry, when applicable).

3 NA = Not applicable.

4 NR = Not Reviewed.

5 ER# = Exception Report identification number (an Exception Report should be completed for an item if "NR" or "No" is checked).

Laboratory Data Package Signature Page

This data package consists of:

This signature page, the laboratory review checklist, and the following reportable data:

- R1 Field chain-of-custody documentation;
- R2 Sample identification cross-reference;
- R3 Test reports (analytical data sheets) for each environmental sample that includes:
 - a) Items consistent with NELAC 5.13
 - b) dilution factors,
 - c) preparation methods,
 - d) cleanup methods, and
 - e) if required for the project, tentatively identified compounds (TICs).
- R4 Surrogate recovery data including:
 - a) Calculated recovery (%R), and
 - b) The laboratory's surrogate QC limits.
- R5 Test reports/summary forms for blank samples;
- R6 Test reports/summary forms for laboratory control samples (LCSs) including:
 - a) LCS spiking amounts,
 - b) Calculated %R for each analyte, and
 - c) The laboratory's LCS QC limits.
- R7 Test reports for project matrix spike/matrix spike duplicates (MS/MSDs) including:
 - a) Samples associated with the MS/MSD clearly identified,
 - b) MS/MSD spiking amounts,
 - c) Concentration of each MS/MSD analyte measured in the parent and spiked samples,
 - d) Calculated %Rs and relative percent differences (RPDs), and
 - e) The laboratory's MS/MSD QC limits
- R8 Laboratory analytical duplicate (if applicable) recovery and precision:
 - a) the amount of analyte measured in the duplicate,
 - b) the calculated RPD, and
 - c) the laboratory's QC limits for analytical duplicates.
- R9 List of method quantitation limits (MQLs) for each analyte for each method and matrix;
- R10 Other problems or anomalies.

The Exception Report for every "No" or "Not Reviewed (NR)" item in laboratory review checklist.

Release Statement: I am responsible for the release of this laboratory data package. This data package has been reviewed by the laboratory and is complete and technically compliant with the requirements of the methods used, except where noted by the laboratory in the attached exception reports. By my signature below, I affirm to the best of my knowledge, all problems/anomalies, observed by the laboratory as having the potential to affect the quality of the data, have been identified by the laboratory in the Laboratory Review Checklist, and no information or data have been knowingly withheld that would affect the quality of the data.

John DuPont – General Manager

Scott Schroeder – Technical Director



Signature

03/26/12

Date

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Lab Order: 1203116

CASE NARRATIVE

This case narrative describes abnormalities and deviations that may affect the results and summarizes all known issues that need to be highlighted for the data user to assess the results. This case narrative and the report contents are compliant with DoD QSM Ver 4.2 and NELAC.

Method SW6020 - Metals Analysis (total & dissolved)
Method SW7470A - Mercury Analysis (total & dissolved)
Method M8015D - DRO Analysis
Method M8015V - GRO Analysis
Method SW8270C - Semivolatile Organics (Some compounds are not NELAC Certified)
Method SW8260C - Volatile Organics
Method E300 - Anions Analysis
Method M2320 B - Alkalinity Analysis
Method M4500-H+ B - pH of a Water
Method M5310C - TOC Analysis

Exception Report R1-01

The samples were received and log-in performed on 3/13/2012. A total of 9 samples were received and analyzed. The samples arrived in good condition and were properly packaged.

Exception Report R5-04

For DRO Analysis, diesel range organics were detected below the reporting limit in Method Blank-50976. The associated samples may be biased high. No further corrective action was taken.

Exception Report R6-04 and R6-06

For Semivolatiles Analysis, the recoveries/RPD's of a few compounds for the Laboratory Control Spike and Laboratory Control Spike Duplicate (LCS-50965) were outside of the method control limits. These are flagged accordingly in the QC Summary report. These compounds are within method control limits in the associated ICV. No further corrective action was taken.

Exception Report R7-02

For Semivolatiles analysis an MS/MSD was not performed due to insufficient sample volume. An LCS/LCSD was performed instead.

Exception Report R7-03 and R7-04

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Lab Order: 1203116

CASE NARRATIVE

For Volatiles Analysis, the recovery of 2-Chloroethylvinylether for the Matrix Spike and Matrix Spike Duplicate (1203088-01 MS/MSD) were outside of the method control limits. These are flagged accordingly in the QC Summary report. This compound is within method control limits in the associated LCS. The reference sample selected for the QC sample was not from this workorder. No further corrective action was taken.

For Trace and Dissolved Metals Analysis, the recoveries of several analytes for the Matrix Spike and Matrix Spike Duplicate (1203088-01 MS/MSD) were below the method control limits. These are flagged accordingly in the QC Summary report. These analytes are within method control limits in the associated LCS. The reference sample selected for the QC sample was not from this workorder. No further corrective action was taken.

Exception Report R10-01

For Trace and Dissolved Metals Analysis, some analytes for the Samples showed dissolved results as slightly higher than the total results . The results were within acceptable analytical variation limits.

Exception Report S1-06

For Volatiles analysis, the recovery of Dichlorodifluoromethane for the Second Source Calibration Verification is above the method control limits. The associated samples are nondetect for this compound. No further corrective action was taken.

Exception Report S2-02

For Volatiles Analysis, the recoveries of two compounds for the Initial Calibration Verification (ICV-120319) were slightly above the method control limits. These are flagged accordingly in the QC Summary report. These compounds are within method control limits in the associated LCS. No further corrective action was taken.

For Semivolatiles Analysis, the recovery of Bis(2-chloroisoprpyl)ether for the Initial Calibration Verification (ICV-120318) was slightly below the method control limits. This is flagged accordingly in the QC Summary report. This compound is within method control limits in the associated LCS. No further corrective action was taken.

Exception Report S2-04

For Metals Analysis, Magnesium was detected below the reporting limit in the Continuing Calibration Blank (CCB3-120319). This analyte was reported in the Method Blank, LCS/LCSD only, the associated sample was reanalyzed and reported for this analyte the following day. No further corrective action was taken.

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Lab Order: 1203116

CASE NARRATIVE

Exception Report S4-01

For Metals Analysis, the response factor of some of the internal standards for the Continuing Calibration Blank (CCB2-120321) were above the method control limits. The associated analytes are nondetect for this sample. No further corrective action was taken.

For Metals Analysis, the response factor of the internal standards for the Continuing Calibration Verification (CCV2-120321) were above the method control limits. The recoveries of the associated analytes are within method control limits. No further corrective action was taken.

Exception Report S5-01

For Volatile and Semivolatiles Analysis, some samples and/or standards were manually integrated. Please refer to the manual integration tables after the sequence reports for the full list of samples, standards, and the compounds that were manually integrated.

Exception Report S9-01

For Trace and Dissolved Metals Analysis, the recovery of Selenium for the Post Digestion Spike (1203088-01 PDS) was below the method control limits. This is flagged accordingly in the QC Summary report. This analyte is within method control limits in the associated Serial Dilution. No further corrective action was taken.

A summary of project communication follows:

DHL Analytical received the Project RFQ from the client on 12/29/09. Completed RFQ returned to client via email on 1/07/2010. Purchase Order/Terms and Conditions received and signed and approved by both parties on 01/25/2010.

Brad Davis of Zia requested a bottle kit via email from Jennifer Barker of DHL on 2/16/2012. A DHL BottleKit #3137 sent on 2/20/2012 via Lonestar Overnight, to arrive by 2/22/2012.

This sample delivery group arrived at DHL Analytical 3/13/2012. Sample summary sent via email from Log-in to client on 3/13/2012.

All hardcopies for the sample kit request, bill of lading for sample kit sent and login summary are kept in project folder.

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Lab Order: 1203116

Work Order Sample Summary

Lab Smp ID	Client Sample ID	Tag Number	Date Collected	Date Recved
1203116-01	HLSF-3839-HMW-035-0312		03/12/12 10:20 AM	3/13/2012
1203116-02	HLSF-3839-HMW-135-0312		03/12/12 10:20 AM	3/13/2012
1203116-03	HLSF-3839-HMW-TB-1-0312		03/12/12 10:20 AM	3/13/2012
1203116-04	HLSF-3839-HMW-TB-2-0312		03/12/12 12:10 PM	3/13/2012
1203116-05	HLSF-3839-HMW-034-0312		03/12/12 12:10 PM	3/13/2012
1203116-06	HLSF-3839-HMW-059-0312		03/12/12 01:25 PM	3/13/2012
1203116-07	HLSF-3839-RB-001-0312		03/12/12 02:15 PM	3/13/2012
1203116-08	HLSF-3839-HMW-032-0312		03/12/12 03:40 PM	3/13/2012
1203116-09	HLSF-3839-HMW-TB3-0312		03/12/12 03:40 PM	3/13/2012

Lab Order: 1203116
Client: Zia Engineering & Environmental
Project: HELSTF Construction Landfill

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1203116-01A	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020
1203116-01B	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	03/16/12 09:49 AM	50997
1203116-01C	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	M5310C	TOC prep Aqueous	03/14/12 08:30 AM	50940
1203116-01D	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/15/12 01:37 PM	50979
1203116-01E	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/16/12 09:42 AM	50994
1203116-01F	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	M2320 B	Alkalinity Preparation	03/13/12 01:45 PM	50938
	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	E300	Anion Preparation	03/14/12 08:54 AM	50936
	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	M4500-H+ B	pH Preparation	03/13/12 01:00 PM	50928
1203116-01G	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
1203116-01H	HLSF-3839-HMW-035-0312	03/12/12 10:20 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/14/12 09:24 AM	50939
1203116-02A	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020
1203116-02B	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	03/16/12 09:49 AM	50997
1203116-02C	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	M5310C	TOC prep Aqueous	03/14/12 08:30 AM	50940
1203116-02D	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958

Lab Order: 1203116
Client: Zia Engineering & Environmental
Project: HELSTF Construction Landfill

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1203116-02D	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/15/12 01:37 PM	50979
1203116-02E	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/16/12 09:42 AM	50994
1203116-02F	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	M2320 B	Alkalinity Preparation	03/13/12 01:45 PM	50938
	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	E300	Anion Preparation	03/14/12 08:54 AM	50936
	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	M4500-H+ B	pH Preparation	03/13/12 01:00 PM	50928
1203116-02G	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
1203116-02H	HLSF-3839-HMW-135-0312	03/12/12 10:20 AM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/14/12 09:24 AM	50939
1203116-03A	HLSF-3839-HMW-TB-1-0312	03/12/12 10:20 AM	Trip Blank	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020
1203116-04A	HLSF-3839-HMW-TB-2-0312	03/12/12 12:10 PM	Trip Blank	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020
1203116-05A	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020
1203116-05B	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	03/16/12 09:49 AM	50997
1203116-05C	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	M5310C	TOC prep Aqueous	03/14/12 08:30 AM	50940
1203116-05D	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1203116-05D	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/15/12 01:37 PM	50979
1203116-05E	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/16/12 09:42 AM	50994
1203116-05F	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	M2320 B	Alkalinity Preparation	03/13/12 01:45 PM	50938
	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	E300	Anion Preparation	03/14/12 08:54 AM	50936
	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	M4500-H+ B	pH Preparation	03/13/12 01:00 PM	50928
1203116-05G	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
1203116-05H	HLSF-3839-HMW-034-0312	03/12/12 12:10 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/14/12 09:24 AM	50939
1203116-06A	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020
1203116-06B	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	03/16/12 09:49 AM	50997
1203116-06C	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	M5310C	TOC prep Aqueous	03/14/12 08:30 AM	50940
1203116-06D	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/15/12 01:37 PM	50979
1203116-06E	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1203116-06E	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/16/12 09:42 AM	50994
1203116-06F	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	M2320 B	Alkalinity Preparation	03/13/12 01:45 PM	50938
	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	E300	Anion Preparation	03/14/12 08:54 AM	50936
	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	M4500-H+ B	pH Preparation	03/13/12 01:00 PM	50928
1203116-06G	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
1203116-06H	HLSF-3839-HMW-059-0312	03/12/12 01:25 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/14/12 09:24 AM	50939
1203116-07A	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020
1203116-07B	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW5030C	Purge and Trap Water GC-Gas	03/16/12 09:49 AM	50997
1203116-07C	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	M5310C	TOC prep Aqueous	03/14/12 08:30 AM	50940
1203116-07D	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW7470A	Mercury Aq Prep, Total	03/15/12 01:37 PM	50979
1203116-07E	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW7470A	Mercury Aq Prep, Total	03/16/12 09:42 AM	50994
1203116-07G	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	M2320 B	Alkalinity Preparation	03/13/12 01:45 PM	50938
	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	E300	Anion Preparation	03/14/12 08:54 AM	50936
	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	M4500-H+ B	pH Preparation	03/13/12 01:00 PM	50928
1203116-07H	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

PREP DATES REPORT

Sample ID	Client Sample ID	Collection Date	Matrix	Test Number	Test Name	Prep Date	Batch ID
1203116-07H	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
1203116-07I	HLSF-3839-RB-001-0312	03/12/12 02:15 PM	Equip Blank	SW3510C	Aq Prep Sep Funnel: DRO	03/15/12 01:10 PM	50976
1203116-08A	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020
1203116-08B	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW5030C	Purge and Trap Water GC-Gas	03/16/12 09:49 AM	50997
1203116-08C	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	M5310C	TOC prep Aqueous	03/14/12 08:30 AM	50940
1203116-08D	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3005A	Aq Prep Metals : ICP-MS	03/15/12 08:32 AM	50958
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/15/12 01:37 PM	50979
1203116-08E	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3005A	Aq Prep Metals: Dissolved	03/15/12 08:33 AM	50959
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW7470A	Mercury Aq Prep, Total	03/16/12 09:42 AM	50994
1203116-08F	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	M2320 B	Alkalinity Preparation	03/13/12 01:45 PM	50938
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	E300	Anion Preparation	03/14/12 08:54 AM	50936
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	M4500-H+ B	pH Preparation	03/13/12 01:00 PM	50928
1203116-08G	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: BNA	03/15/12 09:10 AM	50965
1203116-08H	HLSF-3839-HMW-032-0312	03/12/12 03:40 PM	Aqueous	SW3510C	Aq Prep Sep Funnel: DRO	03/14/12 09:24 AM	50939
1203116-09A	HLSF-3839-HMW-TB3-0312	03/12/12 03:40 PM	Trip Blank	SW5030C	Purge and Trap Water GC/MS	03/19/12 09:09 AM	51020

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1203116-01A	HLSF-3839-HMW-035-0312	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 01:33 PM	GCMS7_120319A
1203116-01B	HLSF-3839-HMW-035-0312	Aqueous	M8015V	TPH Purgeable by GC - Water	50997	1	03/16/12 12:27 PM	GC4_120316A
1203116-01C	HLSF-3839-HMW-035-0312	Aqueous	M5310C	Total Organic Carbon	50940	1	03/14/12 11:32 AM	TOC_120314A
1203116-01D	HLSF-3839-HMW-035-0312	Aqueous	SW7470A	Total Mercury: Aqueous	50979	1	03/19/12 03:13 PM	CETAC_HG_120319A
	HLSF-3839-HMW-035-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	1	03/19/12 06:40 PM	ICP-MS2_120319B
	HLSF-3839-HMW-035-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	100	03/21/12 03:30 PM	ICP-MS2_120321B
1203116-01E	HLSF-3839-HMW-035-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	100	03/21/12 04:00 PM	ICP-MS2_120321B
	HLSF-3839-HMW-035-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	1	03/19/12 03:04 PM	ICP-MS3_120319B
	HLSF-3839-HMW-035-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	100	03/22/12 01:03 PM	ICP-MS3_120322B
	HLSF-3839-HMW-035-0312	Aqueous	SW7470A	Mercury Filtered (0.45µ)	50994	1	03/19/12 03:40 PM	CETAC_HG_120319A
1203116-01F	HLSF-3839-HMW-035-0312	Aqueous	M2320 B	Alkalinity	50938	1	03/13/12 02:16 PM	TITRATOR_120313B
	HLSF-3839-HMW-035-0312	Aqueous	E300	Anions by IC method - Water	50936	100	03/14/12 10:35 AM	IC2_120314A
	HLSF-3839-HMW-035-0312	Aqueous	M4500-H+ B	pH	50928	1	03/13/12 01:26 PM	TITRATOR_120313A
1203116-01G	HLSF-3839-HMW-035-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/18/12 01:40 PM	GCMS9_120318B
	HLSF-3839-HMW-035-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/19/12 07:41 AM	GCMS9_120318A
1203116-01H	HLSF-3839-HMW-035-0312	Aqueous	M8015D	TPH Extractable by GC - Water	50939	1	03/18/12 10:48 AM	GC15_120318A
1203116-02A	HLSF-3839-HMW-135-0312	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 01:57 PM	GCMS7_120319A
1203116-02B	HLSF-3839-HMW-135-0312	Aqueous	M8015V	TPH Purgeable by GC - Water	50997	1	03/16/12 12:52 PM	GC4_120316A
1203116-02C	HLSF-3839-HMW-135-0312	Aqueous	M5310C	Total Organic Carbon	50940	1	03/14/12 11:54 AM	TOC_120314A
1203116-02D	HLSF-3839-HMW-135-0312	Aqueous	SW7470A	Total Mercury: Aqueous	50979	1	03/19/12 03:15 PM	CETAC_HG_120319A

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1203116-02D	HLSF-3839-HMW-135-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	1	03/19/12 06:45 PM	ICP-MS2_120319B
	HLSF-3839-HMW-135-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	100	03/21/12 03:36 PM	ICP-MS2_120321B
1203116-02E	HLSF-3839-HMW-135-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	100	03/22/12 01:09 PM	ICP-MS3_120322B
	HLSF-3839-HMW-135-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	100	03/21/12 04:06 PM	ICP-MS2_120321B
	HLSF-3839-HMW-135-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	1	03/19/12 03:09 PM	ICP-MS3_120319B
	HLSF-3839-HMW-135-0312	Aqueous	SW7470A	Mercury Filtered (0.45µ)	50994	1	03/19/12 03:42 PM	CETAC_HG_120319A
1203116-02F	HLSF-3839-HMW-135-0312	Aqueous	M2320 B	Alkalinity	50938	1	03/13/12 02:25 PM	TITRATOR_120313B
	HLSF-3839-HMW-135-0312	Aqueous	E300	Anions by IC method - Water	50936	100	03/14/12 11:34 AM	IC2_120314A
	HLSF-3839-HMW-135-0312	Aqueous	M4500-H+ B	pH	50928	1	03/13/12 01:32 PM	TITRATOR_120313A
1203116-02G	HLSF-3839-HMW-135-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/19/12 08:04 AM	GCMS9_120318A
	HLSF-3839-HMW-135-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/18/12 02:03 PM	GCMS9_120318B
1203116-02H	HLSF-3839-HMW-135-0312	Aqueous	M8015D	TPH Extractable by GC - Water	50939	1	03/18/12 10:57 AM	GC15_120318A
1203116-03A	HLSF-3839-HMW-TB-1-0312	Trip Blank	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 02:22 PM	GCMS7_120319A
1203116-04A	HLSF-3839-HMW-TB-2-0312	Trip Blank	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 02:46 PM	GCMS7_120319A
1203116-05A	HLSF-3839-HMW-034-0312	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 03:11 PM	GCMS7_120319A
1203116-05B	HLSF-3839-HMW-034-0312	Aqueous	M8015V	TPH Purgeable by GC - Water	50997	1	03/16/12 01:17 PM	GC4_120316A
1203116-05C	HLSF-3839-HMW-034-0312	Aqueous	M5310C	Total Organic Carbon	50940	1	03/14/12 12:15 PM	TOC_120314A
1203116-05D	HLSF-3839-HMW-034-0312	Aqueous	SW7470A	Total Mercury: Aqueous	50979	1	03/19/12 03:17 PM	CETAC_HG_120319A
	HLSF-3839-HMW-034-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	200	03/21/12 03:42 PM	ICP-MS2_120321B
	HLSF-3839-HMW-034-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	200	03/22/12 01:15 PM	ICP-MS3_120322B

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1203116-05D	HLSF-3839-HMW-034-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	1	03/19/12 06:51 PM	ICP-MS2_120319B
1203116-05E	HLSF-3839-HMW-034-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	1	03/19/12 04:00 PM	ICP-MS3_120319B
	HLSF-3839-HMW-034-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	200	03/22/12 01:26 PM	ICP-MS3_120322B
	HLSF-3839-HMW-034-0312	Aqueous	SW7470A	Mercury Filtered (0.45µ)	50994	1	03/19/12 03:44 PM	CETAC_HG_120319A
1203116-05F	HLSF-3839-HMW-034-0312	Aqueous	M2320 B	Alkalinity	50938	1	03/13/12 02:30 PM	TITRATOR_120313B
	HLSF-3839-HMW-034-0312	Aqueous	E300	Anions by IC method - Water	50936	100	03/14/12 11:48 AM	IC2_120314A
	HLSF-3839-HMW-034-0312	Aqueous	M4500-H+ B	pH	50928	1	03/13/12 01:35 PM	TITRATOR_120313A
1203116-05G	HLSF-3839-HMW-034-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/19/12 08:27 AM	GCMS9_120318A
	HLSF-3839-HMW-034-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/18/12 02:26 PM	GCMS9_120318B
1203116-05H	HLSF-3839-HMW-034-0312	Aqueous	M8015D	TPH Extractable by GC - Water	50939	1	03/18/12 11:05 AM	GC15_120318A
1203116-06A	HLSF-3839-HMW-059-0312	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 03:35 PM	GCMS7_120319A
1203116-06B	HLSF-3839-HMW-059-0312	Aqueous	M8015V	TPH Purgeable by GC - Water	50997	1	03/16/12 01:42 PM	GC4_120316A
1203116-06C	HLSF-3839-HMW-059-0312	Aqueous	M5310C	Total Organic Carbon	50940	1	03/14/12 12:36 PM	TOC_120314A
1203116-06D	HLSF-3839-HMW-059-0312	Aqueous	SW7470A	Total Mercury: Aqueous	50979	1	03/19/12 03:19 PM	CETAC_HG_120319A
	HLSF-3839-HMW-059-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	1	03/19/12 06:57 PM	ICP-MS2_120319B
	HLSF-3839-HMW-059-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	200	03/21/12 03:48 PM	ICP-MS2_120321B
	HLSF-3839-HMW-059-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	200	03/22/12 01:20 PM	ICP-MS3_120322B
1203116-06E	HLSF-3839-HMW-059-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	200	03/21/12 04:53 PM	ICP-MS2_120321B
	HLSF-3839-HMW-059-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	1	03/19/12 03:20 PM	ICP-MS3_120319B
	HLSF-3839-HMW-059-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	200	03/22/12 01:32 PM	ICP-MS3_120322B

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1203116-06E	HLSF-3839-HMW-059-0312	Aqueous	SW7470A	Mercury Filtered (0.45µ)	50994	1	03/19/12 03:46 PM	CETAC_HG_120319A
1203116-06F	HLSF-3839-HMW-059-0312	Aqueous	M2320 B	Alkalinity	50938	1	03/13/12 02:35 PM	TITRATOR_120313B
	HLSF-3839-HMW-059-0312	Aqueous	E300	Anions by IC method - Water	50936	100	03/14/12 12:28 PM	IC2_120314A
	HLSF-3839-HMW-059-0312	Aqueous	M4500-H+ B	pH	50928	1	03/13/12 01:37 PM	TITRATOR_120313A
1203116-06G	HLSF-3839-HMW-059-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/19/12 08:51 AM	GCMS9_120318A
	HLSF-3839-HMW-059-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/18/12 02:49 PM	GCMS9_120318B
1203116-06H	HLSF-3839-HMW-059-0312	Aqueous	M8015D	TPH Extractable by GC - Water	50939	1	03/18/12 11:14 AM	GC15_120318A
1203116-07A	HLSF-3839-RB-001-0312	Equip Blank	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 04:00 PM	GCMS7_120319A
1203116-07B	HLSF-3839-RB-001-0312	Equip Blank	M8015V	TPH Purgeable by GC - Water	50997	1	03/16/12 02:08 PM	GC4_120316A
1203116-07C	HLSF-3839-RB-001-0312	Equip Blank	M5310C	Total Organic Carbon	50940	1	03/14/12 12:55 PM	TOC_120314A
1203116-07D	HLSF-3839-RB-001-0312	Equip Blank	SW7470A	Total Mercury: Aqueous	50979	1	03/19/12 03:21 PM	CETAC_HG_120319A
	HLSF-3839-RB-001-0312	Equip Blank	SW6020	Trace Metals: ICP-MS - Water	50958	1	03/19/12 07:03 PM	ICP-MS2_120319B
	HLSF-3839-RB-001-0312	Equip Blank	SW6020	Trace Metals: ICP-MS - Water	50958	1	03/21/12 03:18 PM	ICP-MS2_120321B
1203116-07E	HLSF-3839-RB-001-0312	Equip Blank	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	1	03/19/12 03:26 PM	ICP-MS3_120319B
	HLSF-3839-RB-001-0312	Equip Blank	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	1	03/21/12 03:24 PM	ICP-MS2_120321B
	HLSF-3839-RB-001-0312	Equip Blank	SW7470A	Mercury Filtered (0.45µ)	50994	1	03/19/12 03:48 PM	CETAC_HG_120319A
1203116-07G	HLSF-3839-RB-001-0312	Equip Blank	M2320 B	Alkalinity	50938	1	03/13/12 02:37 PM	TITRATOR_120313B
	HLSF-3839-RB-001-0312	Equip Blank	E300	Anions by IC method - Water	50936	1	03/14/12 09:56 AM	IC2_120314A
	HLSF-3839-RB-001-0312	Equip Blank	M4500-H+ B	pH	50928	1	03/13/12 01:40 PM	TITRATOR_120313A
1203116-07H	HLSF-3839-RB-001-0312	Equip Blank	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/19/12 09:14 AM	GCMS9_120318A

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

ANALYTICAL DATES REPORT

Sample ID	Client Sample ID	Matrix	Test Number	Test Name	Batch ID	Dilution	Analysis Date	Run ID
1203116-07H	HLSF-3839-RB-001-0312	Equip Blank	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/18/12 03:12 PM	GCMS9_120318B
1203116-07I	HLSF-3839-RB-001-0312	Equip Blank	M8015D	TPH Extractable by GC - Water	50976	1	03/18/12 12:51 PM	GC15_120318A
1203116-08A	HLSF-3839-HMW-032-0312	Aqueous	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 04:24 PM	GCMS7_120319A
1203116-08B	HLSF-3839-HMW-032-0312	Aqueous	M8015V	TPH Purgeable by GC - Water	50997	1	03/16/12 02:33 PM	GC4_120316A
1203116-08C	HLSF-3839-HMW-032-0312	Aqueous	M5310C	Total Organic Carbon	50940	1	03/14/12 01:17 PM	TOC_120314A
1203116-08D	HLSF-3839-HMW-032-0312	Aqueous	SW7470A	Total Mercury: Aqueous	50979	1	03/19/12 03:23 PM	CETAC_HG_120319A
	HLSF-3839-HMW-032-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	1	03/19/12 07:09 PM	ICP-MS2_120319B
	HLSF-3839-HMW-032-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	200	03/21/12 03:54 PM	ICP-MS2_120321B
	HLSF-3839-HMW-032-0312	Aqueous	SW6020	Trace Metals: ICP-MS - Water	50958	200	03/22/12 01:43 PM	ICP-MS3_120322B
1203116-08E	HLSF-3839-HMW-032-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	200	03/21/12 04:59 PM	ICP-MS2_120321B
	HLSF-3839-HMW-032-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	1	03/19/12 03:32 PM	ICP-MS3_120319B
	HLSF-3839-HMW-032-0312	Aqueous	SW6020	Dissolved Metals-ICPMS (0.45µ)	50959	200	03/22/12 01:37 PM	ICP-MS3_120322B
	HLSF-3839-HMW-032-0312	Aqueous	SW7470A	Mercury Filtered (0.45µ)	50994	1	03/19/12 03:50 PM	CETAC_HG_120319A
1203116-08F	HLSF-3839-HMW-032-0312	Aqueous	M2320 B	Alkalinity	50938	1	03/13/12 02:39 PM	TITRATOR_120313B
	HLSF-3839-HMW-032-0312	Aqueous	E300	Anions by IC method - Water	50936	100	03/14/12 12:43 PM	IC2_120314A
	HLSF-3839-HMW-032-0312	Aqueous	M4500-H+ B	pH	50928	1	03/13/12 01:43 PM	TITRATOR_120313A
1203116-08G	HLSF-3839-HMW-032-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/19/12 09:37 AM	GCMS9_120318A
	HLSF-3839-HMW-032-0312	Aqueous	SW8270C	Semivolatiles by GC/MS - Water	50965	1	03/18/12 03:35 PM	GCMS9_120318B
1203116-08H	HLSF-3839-HMW-032-0312	Aqueous	M8015D	TPH Extractable by GC - Water	50939	1	03/18/12 11:49 AM	GC15_120318A
1203116-09A	HLSF-3839-HMW-TB3-0312	Trip Blank	SW8260C	8260 Water Volatiles by GC/MS	51020	1	03/19/12 04:49 PM	GCMS7_120319A

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-035-0312
Lab ID: 1203116-01
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		M8015D					Analyst: DO
TPH-DRO C10-C28	0.0502	0.0500	0.100	J	mg/L	1	03/18/12 10:48 AM
Surr: Isopropylbenzene	52.5	0	47-142		%REC	1	03/18/12 10:48 AM
Surr: Octacosane	90.8	0	51-124		%REC	1	03/18/12 10:48 AM
TPH PURGEABLE BY GC - WATER		M8015V					Analyst: DEW
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/16/12 12:27 PM
Surr: Tetrachlorethene	111	0	74-138		%REC	1	03/16/12 12:27 PM
MERCURY FILTERED (0.45µ)		SW7470A					Analyst: LM
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:40 PM
TOTAL MERCURY: AQUEOUS		SW7470A					Analyst: LM
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:13 PM
DISSOLVED METALS-ICPMS (0.45µ)		SW6020					Analyst: AJR
Arsenic	0.00894	0.00200	0.00600		mg/L	1	03/19/12 03:04 PM
Barium	0.0103	0.00300	0.0100		mg/L	1	03/19/12 03:04 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:04 PM
Calcium	466	10.0	30.0		mg/L	100	03/21/12 04:00 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 03:04 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:04 PM
Magnesium	546	10.0	30.0		mg/L	100	03/22/12 01:03 PM
Potassium	45.4	10.0	30.0		mg/L	100	03/22/12 01:03 PM
Selenium	0.263	0.00200	0.00600		mg/L	1	03/19/12 03:04 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:04 PM
Sodium	2010	10.0	30.0		mg/L	100	03/22/12 01:03 PM
TRACE METALS: ICP-MS - WATER		SW6020					Analyst: AJR
Arsenic	0.00846	0.00200	0.00600		mg/L	1	03/19/12 06:40 PM
Barium	0.0110	0.00300	0.0100		mg/L	1	03/19/12 06:40 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 06:40 PM
Calcium	456	10.0	30.0		mg/L	100	03/21/12 03:30 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 06:40 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 06:40 PM
Magnesium	525	10.0	30.0		mg/L	100	03/21/12 03:30 PM
Potassium	43.3	10.0	30.0		mg/L	100	03/21/12 03:30 PM
Selenium	0.254	0.00200	0.00600		mg/L	1	03/19/12 06:40 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 06:40 PM
Sodium	2060	10.0	30.0		mg/L	100	03/21/12 03:30 PM
SEMIVOLATILES BY GC/MS - WATER		SW8270C					Analyst: DO
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM

Qualifiers:

- * Value exceeds TCLP Maximum Concentration Level
- B Analyte detected in the associated Method Blank
- C Sample Result or QC discussed in the Case Narrative
- DF Dilution Factor
- E TPH pattern not Gas or Diesel Range Pattern
- J Analyte detected between MDL and RL
- MDL Method Detection Limit
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-035-0312
Lab ID: 1203116-01
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS - WATER		SW8270C			Analyst: DO		
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 07:41 AM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/18/12 01:40 PM
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 01:40 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
3,3'-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 01:40 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 01:40 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 01:40 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 01:40 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 01:40 PM

Qualifiers:

* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
RL Reporting Limit	S Spike Recovery outside control limits
N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-035-0312
Lab ID: 1203116-01
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Benzoic acid	0.00426	0.00200	0.00600	J	mg/L	1	03/18/12 01:40 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 01:40 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/18/12 01:40 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 01:40 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 01:40 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 01:40 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	03/19/12 07:41 AM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 01:40 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 01:40 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 07:41 AM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 01:40 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/18/12 01:40 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

CLIENT: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill
 Project No:
 Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-035-0312
 Lab ID: 1203116-01
 Collection Date: 03/12/12 10:20 AM
 Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS - WATER		SW8270C			Analyst: DO		
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 07:41 AM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 07:41 AM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 01:40 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/18/12 01:40 PM
Surr: 2,4,6-Tribromophenol	97.0	0	42-124		%REC	1	03/19/12 07:41 AM
Surr: 2,4,6-Tribromophenol	101	0	42-124		%REC	1	03/18/12 01:40 PM
Surr: 2-Fluorobiphenyl	86.2	0	50-110		%REC	1	03/19/12 07:41 AM
Surr: 2-Fluorobiphenyl	97.0	0	50-110		%REC	1	03/18/12 01:40 PM
Surr: 2-Fluorophenol	67.8	0	20-110		%REC	1	03/18/12 01:40 PM
Surr: 2-Fluorophenol	66.2	0	20-110		%REC	1	03/19/12 07:41 AM
Surr: 4-Terphenyl-d14	87.3	0	51-135		%REC	1	03/19/12 07:41 AM
Surr: 4-Terphenyl-d14	99.3	0	51-135		%REC	1	03/18/12 01:40 PM
Surr: Nitrobenzene-d5	90.8	0	41-110		%REC	1	03/19/12 07:41 AM
Surr: Nitrobenzene-d5	89.5	0	41-110		%REC	1	03/18/12 01:40 PM
Surr: Phenol-d6	44.5	0	20-115		%REC	1	03/19/12 07:41 AM
Surr: Phenol-d6	43.0	0	20-115		%REC	1	03/18/12 01:40 PM
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 01:33 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 01:33 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 01:33 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 01:33 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 B Analyte detected in the associated Method Blank
 C Sample Result or QC discussed in the Case Narrative
 DF Dilution Factor
 E TPH pattern not Gas or Diesel Range Pattern
 J Analyte detected between MDL and RL
 MDL Method Detection Limit
 ND Not Detected at the Method Detection Limit
 RL Reporting Limit
 S Spike Recovery outside control limits
 N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-035-0312
Lab ID: 1203116-01
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 01:33 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 01:33 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:33 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:33 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:33 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:33 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:33 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 01:33 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:33 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:33 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 01:33 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 01:33 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-035-0312
Lab ID: 1203116-01
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:33 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 01:33 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 01:33 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 01:33 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:33 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 01:33 PM
Surr: 1,2-Dichloroethane-d4	104	0	70-120		%REC	1	03/19/12 01:33 PM
Surr: 4-Bromofluorobenzene	105	0	75-120		%REC	1	03/19/12 01:33 PM
Surr: Dibromofluoromethane	103	0	85-115		%REC	1	03/19/12 01:33 PM
Surr: Toluene-d8	98.6	0	85-120		%REC	1	03/19/12 01:33 PM
ANIONS BY IC METHOD - WATER		E300			Analyst: JBC		
Chloride	1140	30.0	100		mg/L	100	03/14/12 10:35 AM
Sulfate	6190	100	300		mg/L	100	03/14/12 10:35 AM
ALKALINITY		M2320 B			Analyst: JBC		
Alkalinity, Bicarbonate (As CaCO3)	179	10.0	20.0		mg/L	1	03/13/12 02:16 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:16 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:16 PM
Alkalinity, Total (As CaCO3)	179	10.0	20.0		mg/L	1	03/13/12 02:16 PM
PH		M4500-H+ B			Analyst: JBC		
pH	7.64	0	0		pH Units	1	03/13/12 01:26 PM
TOTAL ORGANIC CARBON		M5310C			Analyst: TGK		
Total Organic Carbon	0.597	0.300	1.00	J	mg/L	1	03/14/12 11:32 AM

Qualifiers:

- * Value exceeds TCLP Maximum Concentration Level
- C Sample Result or QC discussed in the Case Narrative
- E TPH pattern not Gas or Diesel Range Pattern
- MDL Method Detection Limit
- RL Reporting Limit
- N Parameter not NELAC certified
- B Analyte detected in the associated Method Blank
- DF Dilution Factor
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-135-0312
Lab ID: 1203116-02
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		M8015D		Analyst: DO			
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/18/12 10:57 AM
Surr: Isopropylbenzene	51.0	0	47-142		%REC	1	03/18/12 10:57 AM
Surr: Octacosane	89.2	0	51-124		%REC	1	03/18/12 10:57 AM
TPH PURGEABLE BY GC - WATER		M8015V		Analyst: DEW			
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/16/12 12:52 PM
Surr: Tetrachlorethene	111	0	74-138		%REC	1	03/16/12 12:52 PM
MERCURY FILTERED (0.45µ)		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:42 PM
TOTAL MERCURY: AQUEOUS		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:15 PM
DISSOLVED METALS-ICPMS (0.45µ)		SW6020		Analyst: AJR			
Arsenic	0.00915	0.00200	0.00600		mg/L	1	03/19/12 03:09 PM
Barium	0.0109	0.00300	0.0100		mg/L	1	03/19/12 03:09 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:09 PM
Calcium	500	10.0	30.0		mg/L	100	03/22/12 01:09 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 03:09 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:09 PM
Magnesium	555	10.0	30.0		mg/L	100	03/22/12 01:09 PM
Potassium	46.5	10.0	30.0		mg/L	100	03/22/12 01:09 PM
Selenium	0.258	0.00200	0.00600		mg/L	1	03/19/12 03:09 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:09 PM
Sodium	2060	10.0	30.0		mg/L	100	03/22/12 01:09 PM
TRACE METALS: ICP-MS - WATER		SW6020		Analyst: AJR			
Arsenic	0.00840	0.00200	0.00600		mg/L	1	03/19/12 06:45 PM
Barium	0.0110	0.00300	0.0100		mg/L	1	03/19/12 06:45 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 06:45 PM
Calcium	453	10.0	30.0		mg/L	100	03/21/12 03:36 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 06:45 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 06:45 PM
Magnesium	513	10.0	30.0		mg/L	100	03/21/12 03:36 PM
Potassium	41.7	10.0	30.0		mg/L	100	03/21/12 03:36 PM
Selenium	0.238	0.00200	0.00600		mg/L	1	03/19/12 06:45 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 06:45 PM
Sodium	2000	10.0	30.0		mg/L	100	03/21/12 03:36 PM
SEMIVOLATILES BY GC/MS - WATER		SW8270C		Analyst: DO			
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM

Qualifiers:

* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
RL Reporting Limit	S Spike Recovery outside control limits
N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-135-0312
Lab ID: 1203116-02
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 08:04 AM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/18/12 02:03 PM
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:03 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
3,3'-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:03 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:03 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:03 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:03 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:03 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 B Analyte detected in the associated Method Blank
 C Sample Result or QC discussed in the Case Narrative
 DF Dilution Factor
 E TPH pattern not Gas or Diesel Range Pattern
 J Analyte detected between MDL and RL
 MDL Method Detection Limit
 ND Not Detected at the Method Detection Limit
 RL Reporting Limit
 S Spike Recovery outside control limits
 N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-135-0312
Lab ID: 1203116-02
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Benzoic acid	0.00776	0.00200	0.00600		mg/L	1	03/18/12 02:03 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:03 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/18/12 02:03 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:03 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:03 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:03 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	03/19/12 08:04 AM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:03 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:03 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 08:04 AM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:03 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/18/12 02:03 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-135-0312
Lab ID: 1203116-02
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 08:04 AM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:04 AM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:03 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/18/12 02:03 PM
Surr: 2,4,6-Tribromophenol	99.5	0	42-124		%REC	1	03/19/12 08:04 AM
Surr: 2,4,6-Tribromophenol	104	0	42-124		%REC	1	03/18/12 02:03 PM
Surr: 2-Fluorobiphenyl	87.3	0	50-110		%REC	1	03/19/12 08:04 AM
Surr: 2-Fluorobiphenyl	98.8	0	50-110		%REC	1	03/18/12 02:03 PM
Surr: 2-Fluorophenol	65.5	0	20-110		%REC	1	03/18/12 02:03 PM
Surr: 2-Fluorophenol	64.0	0	20-110		%REC	1	03/19/12 08:04 AM
Surr: 4-Terphenyl-d14	89.0	0	51-135		%REC	1	03/19/12 08:04 AM
Surr: 4-Terphenyl-d14	102	0	51-135		%REC	1	03/18/12 02:03 PM
Surr: Nitrobenzene-d5	92.5	0	41-110		%REC	1	03/19/12 08:04 AM
Surr: Nitrobenzene-d5	91.2	0	41-110		%REC	1	03/18/12 02:03 PM
Surr: Phenol-d6	42.0	0	20-115		%REC	1	03/19/12 08:04 AM
Surr: Phenol-d6	41.0	0	20-115		%REC	1	03/18/12 02:03 PM

8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 01:57 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 01:57 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 01:57 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 01:57 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL	Method Detection Limit	ND Not Detected at the Method Detection Limit
RL	Reporting Limit	S Spike Recovery outside control limits
N	Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-135-0312
Lab ID: 1203116-02
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 01:57 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 01:57 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:57 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:57 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:57 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:57 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:57 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 01:57 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:57 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 01:57 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 01:57 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 01:57 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-135-0312
Lab ID: 1203116-02
Collection Date: 03/12/12 10:20 AM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 01:57 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 01:57 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 01:57 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 01:57 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 01:57 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 01:57 PM
Surr: 1,2-Dichloroethane-d4	104	0	70-120		%REC	1	03/19/12 01:57 PM
Surr: 4-Bromofluorobenzene	103	0	75-120		%REC	1	03/19/12 01:57 PM
Surr: Dibromofluoromethane	105	0	85-115		%REC	1	03/19/12 01:57 PM
Surr: Toluene-d8	96.5	0	85-120		%REC	1	03/19/12 01:57 PM
ANIONS BY IC METHOD - WATER		E300			Analyst: JBC		
Chloride	1080	30.0	100		mg/L	100	03/14/12 11:34 AM
Sulfate	5960	100	300		mg/L	100	03/14/12 11:34 AM
ALKALINITY		M2320 B			Analyst: JBC		
Alkalinity, Bicarbonate (As CaCO3)	180	10.0	20.0		mg/L	1	03/13/12 02:25 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:25 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:25 PM
Alkalinity, Total (As CaCO3)	180	10.0	20.0		mg/L	1	03/13/12 02:25 PM
PH		M4500-H+ B			Analyst: JBC		
pH	7.60	0	0		pH Units	1	03/13/12 01:32 PM
TOTAL ORGANIC CARBON		M5310C			Analyst: TGK		
Total Organic Carbon	0.649	0.300	1.00	J	mg/L	1	03/14/12 11:54 AM

Qualifiers:

- * Value exceeds TCLP Maximum Concentration Level
- C Sample Result or QC discussed in the Case Narrative
- E TPH pattern not Gas or Diesel Range Pattern
- MDL Method Detection Limit
- RL Reporting Limit
- N Parameter not NELAC certified
- B Analyte detected in the associated Method Blank
- DF Dilution Factor
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-TB-1-0312
Lab ID: 1203116-03
Collection Date: 03/12/12 10:20 AM
Matrix: TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 02:22 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 02:22 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 02:22 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 02:22 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 02:22 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 02:22 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:22 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:22 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:22 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:22 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:22 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 02:22 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:22 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 C Sample Result or QC discussed in the Case Narrative
 E TPH pattern not Gas or Diesel Range Pattern
 MDL Method Detection Limit
 RL Reporting Limit
 N Parameter not NELAC certified
 B Analyte detected in the associated Method Blank
 DF Dilution Factor
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-TB-1-0312
Lab ID: 1203116-03
Collection Date: 03/12/12 10:20 AM
Matrix: TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:22 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 02:22 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 02:22 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:22 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 02:22 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 02:22 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 02:22 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:22 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 02:22 PM
Surr: 1,2-Dichloroethane-d4	110	0	70-120		%REC	1	03/19/12 02:22 PM
Surr: 4-Bromofluorobenzene	105	0	75-120		%REC	1	03/19/12 02:22 PM
Surr: Dibromofluoromethane	110	0	85-115		%REC	1	03/19/12 02:22 PM
Surr: Toluene-d8	97.8	0	85-120		%REC	1	03/19/12 02:22 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL	Method Detection Limit	ND Not Detected at the Method Detection Limit
RL	Reporting Limit	S Spike Recovery outside control limits
N	Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-TB-2-0312
Lab ID: 1203116-04
Collection Date: 03/12/12 12:10 PM
Matrix: TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 02:46 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 02:46 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 02:46 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 02:46 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 02:46 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 02:46 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:46 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:46 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:46 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:46 PM
Acetone	0.0202	0.00500	0.0150		mg/L	1	03/19/12 02:46 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 02:46 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:46 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-TB-2-0312
Lab ID: 1203116-04
Collection Date: 03/12/12 12:10 PM
Matrix: TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 02:46 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 02:46 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 02:46 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 02:46 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 02:46 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 02:46 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 02:46 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 02:46 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 02:46 PM
Surr: 1,2-Dichloroethane-d4	104	0	70-120		%REC	1	03/19/12 02:46 PM
Surr: 4-Bromofluorobenzene	105	0	75-120		%REC	1	03/19/12 02:46 PM
Surr: Dibromofluoromethane	102	0	85-115		%REC	1	03/19/12 02:46 PM
Surr: Toluene-d8	108	0	85-120		%REC	1	03/19/12 02:46 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL	Method Detection Limit	ND Not Detected at the Method Detection Limit
RL	Reporting Limit	S Spike Recovery outside control limits
N	Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-034-0312
Lab ID: 1203116-05
Collection Date: 03/12/12 12:10 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		M8015D		Analyst: DO			
TPH-DRO C10-C28	0.102	0.0500	0.100		mg/L	1	03/18/12 11:05 AM
Surr: Isopropylbenzene	52.9	0	47-142		%REC	1	03/18/12 11:05 AM
Surr: Octacosane	91.8	0	51-124		%REC	1	03/18/12 11:05 AM
TPH PURGEABLE BY GC - WATER		M8015V		Analyst: DEW			
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/16/12 01:17 PM
Surr: Tetrachlorethene	113	0	74-138		%REC	1	03/16/12 01:17 PM
MERCURY FILTERED (0.45µ)		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:44 PM
TOTAL MERCURY: AQUEOUS		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:17 PM
DISSOLVED METALS-ICPMS (0.45µ)		SW6020		Analyst: AJR			
Arsenic	0.0122	0.00200	0.00600		mg/L	1	03/19/12 04:00 PM
Barium	0.0160	0.00300	0.0100		mg/L	1	03/19/12 04:00 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Calcium	449	20.0	60.0		mg/L	200	03/22/12 01:26 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 04:00 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Magnesium	523	20.0	60.0		mg/L	200	03/22/12 01:26 PM
Potassium	52.1	20.0	60.0	J	mg/L	200	03/22/12 01:26 PM
Selenium	0.00879	0.00200	0.00600		mg/L	1	03/19/12 04:00 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:00 PM
Sodium	2280	20.0	60.0		mg/L	200	03/22/12 01:26 PM
TRACE METALS: ICP-MS - WATER		SW6020		Analyst: AJR			
Arsenic	0.0112	0.00200	0.00600		mg/L	1	03/19/12 06:51 PM
Barium	0.0168	0.00300	0.0100		mg/L	1	03/19/12 06:51 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 06:51 PM
Calcium	418	20.0	60.0		mg/L	200	03/21/12 03:42 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 06:51 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 06:51 PM
Magnesium	515	20.0	60.0		mg/L	200	03/22/12 01:15 PM
Potassium	50.6	20.0	60.0	J	mg/L	200	03/22/12 01:15 PM
Selenium	0.00784	0.00200	0.00600		mg/L	1	03/19/12 06:51 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 06:51 PM
Sodium	2240	20.0	60.0		mg/L	200	03/22/12 01:15 PM
SEMIVOLATILES BY GC/MS - WATER		SW8270C		Analyst: DO			
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM

Qualifiers:

* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
RL Reporting Limit	S Spike Recovery outside control limits
N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-034-0312
Lab ID: 1203116-05
Collection Date: 03/12/12 12:10 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 08:27 AM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/18/12 02:26 PM
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:26 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
3,3'-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:26 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:26 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:26 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:26 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:26 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 B Analyte detected in the associated Method Blank
 C Sample Result or QC discussed in the Case Narrative
 DF Dilution Factor
 E TPH pattern not Gas or Diesel Range Pattern
 J Analyte detected between MDL and RL
 MDL Method Detection Limit
 ND Not Detected at the Method Detection Limit
 RL Reporting Limit
 S Spike Recovery outside control limits
 N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-034-0312
Lab ID: 1203116-05
Collection Date: 03/12/12 12:10 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Benzoic acid	0.0102	0.00200	0.00600		mg/L	1	03/18/12 02:26 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:26 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/18/12 02:26 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:26 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:26 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:26 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	03/19/12 08:27 AM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:26 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:26 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 08:27 AM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:26 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/18/12 02:26 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-034-0312
Lab ID: 1203116-05
Collection Date: 03/12/12 12:10 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 08:27 AM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:27 AM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:26 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/18/12 02:26 PM
Surr: 2,4,6-Tribromophenol	98.5	0	42-124		%REC	1	03/19/12 08:27 AM
Surr: 2,4,6-Tribromophenol	102	0	42-124		%REC	1	03/18/12 02:26 PM
Surr: 2-Fluorobiphenyl	86.8	0	50-110		%REC	1	03/19/12 08:27 AM
Surr: 2-Fluorobiphenyl	98.5	0	50-110		%REC	1	03/18/12 02:26 PM
Surr: 2-Fluorophenol	65.5	0	20-110		%REC	1	03/18/12 02:26 PM
Surr: 2-Fluorophenol	65.2	0	20-110		%REC	1	03/19/12 08:27 AM
Surr: 4-Terphenyl-d14	88.5	0	51-135		%REC	1	03/19/12 08:27 AM
Surr: 4-Terphenyl-d14	101	0	51-135		%REC	1	03/18/12 02:26 PM
Surr: Nitrobenzene-d5	92.5	0	41-110		%REC	1	03/19/12 08:27 AM
Surr: Nitrobenzene-d5	90.2	0	41-110		%REC	1	03/18/12 02:26 PM
Surr: Phenol-d6	42.2	0	20-115		%REC	1	03/19/12 08:27 AM
Surr: Phenol-d6	39.8	0	20-115		%REC	1	03/18/12 02:26 PM

8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 03:11 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 03:11 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 03:11 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 03:11 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 C Sample Result or QC discussed in the Case Narrative
 E TPH pattern not Gas or Diesel Range Pattern
 MDL Method Detection Limit
 RL Reporting Limit
 N Parameter not NELAC certified
 B Analyte detected in the associated Method Blank
 DF Dilution Factor
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-034-0312
Lab ID: 1203116-05
Collection Date: 03/12/12 12:10 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 03:11 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 03:11 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:11 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:11 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:11 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:11 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:11 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 03:11 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:11 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:11 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:11 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 03:11 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 C Sample Result or QC discussed in the Case Narrative
 E TPH pattern not Gas or Diesel Range Pattern
 MDL Method Detection Limit
 RL Reporting Limit
 N Parameter not NELAC certified
 B Analyte detected in the associated Method Blank
 DF Dilution Factor
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-034-0312
Lab ID: 1203116-05
Collection Date: 03/12/12 12:10 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:11 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:11 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:11 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:11 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:11 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 03:11 PM
Surr: 1,2-Dichloroethane-d4	106	0	70-120		%REC	1	03/19/12 03:11 PM
Surr: 4-Bromofluorobenzene	105	0	75-120		%REC	1	03/19/12 03:11 PM
Surr: Dibromofluoromethane	104	0	85-115		%REC	1	03/19/12 03:11 PM
Surr: Toluene-d8	93.9	0	85-120		%REC	1	03/19/12 03:11 PM
ANIONS BY IC METHOD - WATER		E300			Analyst: JBC		
Chloride	817	30.0	100		mg/L	100	03/14/12 11:48 AM
Sulfate	6700	100	300		mg/L	100	03/14/12 11:48 AM
ALKALINITY		M2320 B			Analyst: JBC		
Alkalinity, Bicarbonate (As CaCO3)	174	10.0	20.0		mg/L	1	03/13/12 02:30 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:30 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:30 PM
Alkalinity, Total (As CaCO3)	174	10.0	20.0		mg/L	1	03/13/12 02:30 PM
PH		M4500-H+ B			Analyst: JBC		
pH	7.47	0	0		pH Units	1	03/13/12 01:35 PM
TOTAL ORGANIC CARBON		M5310C			Analyst: TGK		
Total Organic Carbon	0.689	0.300	1.00	J	mg/L	1	03/14/12 12:15 PM

Qualifiers:

* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
RL Reporting Limit	S Spike Recovery outside control limits
N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-059-0312
Lab ID: 1203116-06
Collection Date: 03/12/12 01:25 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		M8015D		Analyst: DO			
TPH-DRO C10-C28	0.0868	0.0500	0.100	J	mg/L	1	03/18/12 11:14 AM
Surr: Isopropylbenzene	47.7	0	47-142		%REC	1	03/18/12 11:14 AM
Surr: Octacosane	89.5	0	51-124		%REC	1	03/18/12 11:14 AM
TPH PURGEABLE BY GC - WATER		M8015V		Analyst: DEW			
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/16/12 01:42 PM
Surr: Tetrachlorethene	109	0	74-138		%REC	1	03/16/12 01:42 PM
MERCURY FILTERED (0.45µ)		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:46 PM
TOTAL MERCURY: AQUEOUS		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:19 PM
DISSOLVED METALS-ICPMS (0.45µ)		SW6020		Analyst: AJR			
Arsenic	0.0142	0.00200	0.00600		mg/L	1	03/19/12 03:20 PM
Barium	0.0105	0.00300	0.0100		mg/L	1	03/19/12 03:20 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:20 PM
Calcium	455	20.0	60.0		mg/L	200	03/22/12 01:32 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 03:20 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:20 PM
Magnesium	555	20.0	60.0		mg/L	200	03/22/12 01:32 PM
Potassium	54.6	20.0	60.0	J	mg/L	200	03/22/12 01:32 PM
Selenium	0.0309	0.00200	0.00600		mg/L	1	03/19/12 03:20 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:20 PM
Sodium	2360	20.0	60.0		mg/L	200	03/22/12 01:32 PM
TRACE METALS: ICP-MS - WATER		SW6020		Analyst: AJR			
Arsenic	0.0135	0.00200	0.00600		mg/L	1	03/19/12 06:57 PM
Barium	0.0115	0.00300	0.0100		mg/L	1	03/19/12 06:57 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 06:57 PM
Calcium	426	20.0	60.0		mg/L	200	03/21/12 03:48 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 06:57 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 06:57 PM
Magnesium	545	20.0	60.0		mg/L	200	03/22/12 01:20 PM
Potassium	54.3	20.0	60.0	J	mg/L	200	03/22/12 01:20 PM
Selenium	0.0295	0.00200	0.00600		mg/L	1	03/19/12 06:57 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 06:57 PM
Sodium	2320	20.0	60.0		mg/L	200	03/22/12 01:20 PM
SEMIVOLATILES BY GC/MS - WATER		SW8270C		Analyst: DO			
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM

Qualifiers:

* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
RL Reporting Limit	S Spike Recovery outside control limits
N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-059-0312
Lab ID: 1203116-06
Collection Date: 03/12/12 01:25 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 08:51 AM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/18/12 02:49 PM
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:49 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
3,3'-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:49 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:49 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:49 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 02:49 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:49 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 B Analyte detected in the associated Method Blank
 C Sample Result or QC discussed in the Case Narrative
 DF Dilution Factor
 E TPH pattern not Gas or Diesel Range Pattern
 J Analyte detected between MDL and RL
 MDL Method Detection Limit
 ND Not Detected at the Method Detection Limit
 RL Reporting Limit
 S Spike Recovery outside control limits
 N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-059-0312
Lab ID: 1203116-06
Collection Date: 03/12/12 01:25 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Benzoic acid	0.00319	0.00200	0.00600	J	mg/L	1	03/18/12 02:49 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:49 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/18/12 02:49 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:49 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:49 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:49 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	03/19/12 08:51 AM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:49 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 02:49 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 08:51 AM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 02:49 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/18/12 02:49 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-059-0312
Lab ID: 1203116-06
Collection Date: 03/12/12 01:25 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 08:51 AM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 08:51 AM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 02:49 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/18/12 02:49 PM
Surr: 2,4,6-Tribromophenol	104	0	42-124		%REC	1	03/19/12 08:51 AM
Surr: 2,4,6-Tribromophenol	112	0	42-124		%REC	1	03/18/12 02:49 PM
Surr: 2-Fluorobiphenyl	91.0	0	50-110		%REC	1	03/19/12 08:51 AM
Surr: 2-Fluorobiphenyl	102	0	50-110		%REC	1	03/18/12 02:49 PM
Surr: 2-Fluorophenol	70.0	0	20-110		%REC	1	03/18/12 02:49 PM
Surr: 2-Fluorophenol	69.5	0	20-110		%REC	1	03/19/12 08:51 AM
Surr: 4-Terphenyl-d14	92.2	0	51-135		%REC	1	03/19/12 08:51 AM
Surr: 4-Terphenyl-d14	106	0	51-135		%REC	1	03/18/12 02:49 PM
Surr: Nitrobenzene-d5	96.2	0	41-110		%REC	1	03/19/12 08:51 AM
Surr: Nitrobenzene-d5	95.2	0	41-110		%REC	1	03/18/12 02:49 PM
Surr: Phenol-d6	46.8	0	20-115		%REC	1	03/19/12 08:51 AM
Surr: Phenol-d6	44.2	0	20-115		%REC	1	03/18/12 02:49 PM

8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 03:35 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 03:35 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 03:35 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 03:35 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL	Method Detection Limit	ND Not Detected at the Method Detection Limit
RL	Reporting Limit	S Spike Recovery outside control limits
N	Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-059-0312
Lab ID: 1203116-06
Collection Date: 03/12/12 01:25 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 03:35 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 03:35 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:35 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:35 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:35 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:35 PM
Acetone	0.0134	0.00500	0.0150	J	mg/L	1	03/19/12 03:35 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 03:35 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:35 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 03:35 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:35 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 03:35 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-059-0312
Lab ID: 1203116-06
Collection Date: 03/12/12 01:25 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C		Analyst: KL			
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:35 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:35 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:35 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:35 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 03:35 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 03:35 PM
Surr: 1,2-Dichloroethane-d4	103	0	70-120		%REC	1	03/19/12 03:35 PM
Surr: 4-Bromofluorobenzene	106	0	75-120		%REC	1	03/19/12 03:35 PM
Surr: Dibromofluoromethane	110	0	85-115		%REC	1	03/19/12 03:35 PM
Surr: Toluene-d8	98.0	0	85-120		%REC	1	03/19/12 03:35 PM
ANIONS BY IC METHOD - WATER		E300		Analyst: JBC			
Chloride	960	30.0	100		mg/L	100	03/14/12 12:28 PM
Sulfate	6830	100	300		mg/L	100	03/14/12 12:28 PM
ALKALINITY		M2320 B		Analyst: JBC			
Alkalinity, Bicarbonate (As CaCO3)	177	10.0	20.0		mg/L	1	03/13/12 02:35 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:35 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:35 PM
Alkalinity, Total (As CaCO3)	177	10.0	20.0		mg/L	1	03/13/12 02:35 PM
PH		M4500-H+ B		Analyst: JBC			
pH	7.75	0	0		pH Units	1	03/13/12 01:37 PM
TOTAL ORGANIC CARBON		M5310C		Analyst: TGK			
Total Organic Carbon	0.649	0.300	1.00	J	mg/L	1	03/14/12 12:36 PM

Qualifiers:

- * Value exceeds TCLP Maximum Concentration Level
- C Sample Result or QC discussed in the Case Narrative
- E TPH pattern not Gas or Diesel Range Pattern
- MDL Method Detection Limit
- RL Reporting Limit
- N Parameter not NELAC certified
- B Analyte detected in the associated Method Blank
- DF Dilution Factor
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-RB-001-0312
Lab ID: 1203116-07
Collection Date: 03/12/12 02:15 PM
Matrix: EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		M8015D		Analyst: DO			
TPH-DRO C10-C28	<0.0500	0.0500	0.100		mg/L	1	03/18/12 12:51 PM
Surr: Isopropylbenzene	58.9	0	47-142		%REC	1	03/18/12 12:51 PM
Surr: Octacosane	91.6	0	51-124		%REC	1	03/18/12 12:51 PM
TPH PURGEABLE BY GC - WATER		M8015V		Analyst: DEW			
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/16/12 02:08 PM
Surr: Tetrachlorethene	106	0	74-138		%REC	1	03/16/12 02:08 PM
MERCURY FILTERED (0.45µ)		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:48 PM
TOTAL MERCURY: AQUEOUS		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:21 PM
DISSOLVED METALS-ICPMS (0.45µ)		SW6020		Analyst: AJR			
Arsenic	<0.00200	0.00200	0.00600		mg/L	1	03/21/12 03:24 PM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 03:26 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:26 PM
Calcium	<0.100	0.100	0.300		mg/L	1	03/21/12 03:24 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/21/12 03:24 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:26 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/21/12 03:24 PM
Potassium	<0.100	0.100	0.300		mg/L	1	03/21/12 03:24 PM
Selenium	<0.00200	0.00200	0.00600		mg/L	1	03/21/12 03:24 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:26 PM
Sodium	0.482	0.100	0.300		mg/L	1	03/21/12 03:24 PM
TRACE METALS: ICP-MS - WATER		SW6020		Analyst: AJR			
Arsenic	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 07:03 PM
Barium	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 07:03 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 07:03 PM
Calcium	<0.100	0.100	0.300		mg/L	1	03/21/12 03:18 PM
Chromium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 07:03 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 07:03 PM
Magnesium	<0.100	0.100	0.300		mg/L	1	03/21/12 03:18 PM
Potassium	<0.100	0.100	0.300		mg/L	1	03/19/12 07:03 PM
Selenium	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 07:03 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 07:03 PM
Sodium	0.727	0.100	0.300		mg/L	1	03/21/12 03:18 PM
SEMIVOLATILES BY GC/MS - WATER		SW8270C		Analyst: DO			
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM

Qualifiers:

* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
RL Reporting Limit	S Spike Recovery outside control limits
N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-RB-001-0312
Lab ID: 1203116-07
Collection Date: 03/12/12 02:15 PM
Matrix: EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS - WATER		SW8270C			Analyst: DO		
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 09:14 AM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/18/12 03:12 PM
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 03:12 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
3,3'-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 03:12 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 03:12 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 03:12 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 03:12 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:12 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 B Analyte detected in the associated Method Blank
 C Sample Result or QC discussed in the Case Narrative
 DF Dilution Factor
 E TPH pattern not Gas or Diesel Range Pattern
 J Analyte detected between MDL and RL
 MDL Method Detection Limit
 ND Not Detected at the Method Detection Limit
 RL Reporting Limit
 S Spike Recovery outside control limits
 N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-RB-001-0312
Lab ID: 1203116-07
Collection Date: 03/12/12 02:15 PM
Matrix: EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS - WATER		SW8270C			Analyst: DO		
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Benzoic acid	0.00457	0.00200	0.00600	J	mg/L	1	03/18/12 03:12 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 03:12 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/18/12 03:12 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:12 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:12 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:12 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	03/19/12 09:14 AM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:12 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:12 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 09:14 AM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 03:12 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/18/12 03:12 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM

Qualifiers:

- * Value exceeds TCLP Maximum Concentration Level
- B Analyte detected in the associated Method Blank
- C Sample Result or QC discussed in the Case Narrative
- DF Dilution Factor
- E TPH pattern not Gas or Diesel Range Pattern
- J Analyte detected between MDL and RL
- MDL Method Detection Limit
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill
 Project No:
 Lab Order: 1203116

Client Sample ID: HLSF-3839-RB-001-0312
 Lab ID: 1203116-07
 Collection Date: 03/12/12 02:15 PM
 Matrix: EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS - WATER		SW8270C			Analyst: DO		
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 09:14 AM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:14 AM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:12 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/18/12 03:12 PM
Surr: 2,4,6-Tribromophenol	103	0	42-124		%REC	1	03/19/12 09:14 AM
Surr: 2,4,6-Tribromophenol	112	0	42-124		%REC	1	03/18/12 03:12 PM
Surr: 2-Fluorobiphenyl	91.2	0	50-110		%REC	1	03/19/12 09:14 AM
Surr: 2-Fluorobiphenyl	104	0	50-110		%REC	1	03/18/12 03:12 PM
Surr: 2-Fluorophenol	69.2	0	20-110		%REC	1	03/18/12 03:12 PM
Surr: 2-Fluorophenol	68.3	0	20-110		%REC	1	03/19/12 09:14 AM
Surr: 4-Terphenyl-d14	92.8	0	51-135		%REC	1	03/19/12 09:14 AM
Surr: 4-Terphenyl-d14	107	0	51-135		%REC	1	03/18/12 03:12 PM
Surr: Nitrobenzene-d5	97.0	0	41-110		%REC	1	03/19/12 09:14 AM
Surr: Nitrobenzene-d5	94.8	0	41-110		%REC	1	03/18/12 03:12 PM
Surr: Phenol-d6	42.8	0	20-115		%REC	1	03/19/12 09:14 AM
Surr: Phenol-d6	41.5	0	20-115		%REC	1	03/18/12 03:12 PM
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:00 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:00 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:00 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 04:00 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 B Analyte detected in the associated Method Blank
 C Sample Result or QC discussed in the Case Narrative
 DF Dilution Factor
 E TPH pattern not Gas or Diesel Range Pattern
 J Analyte detected between MDL and RL
 MDL Method Detection Limit
 ND Not Detected at the Method Detection Limit
 RL Reporting Limit
 S Spike Recovery outside control limits
 N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-RB-001-0312
Lab ID: 1203116-07
Collection Date: 03/12/12 02:15 PM
Matrix: EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:00 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 04:00 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:00 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:00 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:00 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:00 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:00 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 04:00 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Bromodichloromethane	0.00114	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:00 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Chloroform	0.00117	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Dibromochloromethane	0.00115	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:00 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:00 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 04:00 PM

Qualifiers:	*	Value exceeds TCLP Maximum Concentration Level	B	Analyte detected in the associated Method Blank
	C	Sample Result or QC discussed in the Case Narrative	DF	Dilution Factor
	E	TPH pattern not Gas or Diesel Range Pattern	J	Analyte detected between MDL and RL
	MDL	Method Detection Limit	ND	Not Detected at the Method Detection Limit
	RL	Reporting Limit	S	Spike Recovery outside control limits
	N	Parameter not NELAC certified		

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-RB-001-0312
Lab ID: 1203116-07
Collection Date: 03/12/12 02:15 PM
Matrix: EQUIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C		Analyst: KL			
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:00 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:00 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:00 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:00 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:00 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 04:00 PM
Surr: 1,2-Dichloroethane-d4	104	0	70-120		%REC	1	03/19/12 04:00 PM
Surr: 4-Bromofluorobenzene	104	0	75-120		%REC	1	03/19/12 04:00 PM
Surr: Dibromofluoromethane	104	0	85-115		%REC	1	03/19/12 04:00 PM
Surr: Toluene-d8	98.3	0	85-120		%REC	1	03/19/12 04:00 PM
ANIONS BY IC METHOD - WATER		E300		Analyst: JBC			
Chloride	0.475	0.300	1.00	J	mg/L	1	03/14/12 09:56 AM
Sulfate	<1.00	1.00	3.00		mg/L	1	03/14/12 09:56 AM
ALKALINITY		M2320 B		Analyst: JBC			
Alkalinity, Bicarbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:37 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:37 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:37 PM
Alkalinity, Total (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:37 PM
PH		M4500-H+ B		Analyst: JBC			
pH	8.37	0	0		pH Units	1	03/13/12 01:40 PM
TOTAL ORGANIC CARBON		M5310C		Analyst: TGK			
Total Organic Carbon	<0.300	0.300	1.00		mg/L	1	03/14/12 12:55 PM

Qualifiers:

- * Value exceeds TCLP Maximum Concentration Level
- C Sample Result or QC discussed in the Case Narrative
- E TPH pattern not Gas or Diesel Range Pattern
- MDL Method Detection Limit
- RL Reporting Limit
- N Parameter not NELAC certified
- B Analyte detected in the associated Method Blank
- DF Dilution Factor
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-032-0312
Lab ID: 1203116-08
Collection Date: 03/12/12 03:40 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
TPH EXTRACTABLE BY GC - WATER		M8015D		Analyst: DO			
TPH-DRO C10-C28	0.0525	0.0500	0.100	J	mg/L	1	03/18/12 11:49 AM
Surr: Isopropylbenzene	52.2	0	47-142		%REC	1	03/18/12 11:49 AM
Surr: Octacosane	87.4	0	51-124		%REC	1	03/18/12 11:49 AM
TPH PURGEABLE BY GC - WATER		M8015V		Analyst: DEW			
Gasoline Range Organics	<0.0600	0.0600	0.100		mg/L	1	03/16/12 02:33 PM
Surr: Tetrachlorethene	108	0	74-138		%REC	1	03/16/12 02:33 PM
MERCURY FILTERED (0.45µ)		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:50 PM
TOTAL MERCURY: AQUEOUS		SW7470A		Analyst: LM			
Mercury	<0.0000600	0.0000600	0.000200		mg/L	1	03/19/12 03:23 PM
DISSOLVED METALS-ICPMS (0.45µ)		SW6020		Analyst: AJR			
Arsenic	0.00254	0.00200	0.00600	J	mg/L	1	03/19/12 03:32 PM
Barium	0.0173	0.00300	0.0100		mg/L	1	03/19/12 03:32 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:32 PM
Calcium	430	20.0	60.0		mg/L	200	03/21/12 04:59 PM
Calcium	453	20.0	60.0		mg/L	200	03/22/12 01:37 PM
Chromium	0.0393	0.00200	0.00600		mg/L	1	03/19/12 03:32 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 03:32 PM
Magnesium	258	20.0	60.0		mg/L	200	03/22/12 01:37 PM
Potassium	50.3	20.0	60.0	J	mg/L	200	03/22/12 01:37 PM
Selenium	0.0590	0.00200	0.00600		mg/L	1	03/19/12 03:32 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 03:32 PM
Sodium	2290	20.0	60.0		mg/L	200	03/22/12 01:37 PM
TRACE METALS: ICP-MS - WATER		SW6020		Analyst: AJR			
Arsenic	0.00224	0.00200	0.00600	J	mg/L	1	03/19/12 07:09 PM
Barium	0.0176	0.00300	0.0100		mg/L	1	03/19/12 07:09 PM
Cadmium	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 07:09 PM
Calcium	422	20.0	60.0		mg/L	200	03/21/12 03:54 PM
Chromium	0.0406	0.00200	0.00600		mg/L	1	03/19/12 07:09 PM
Lead	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 07:09 PM
Magnesium	256	20.0	60.0		mg/L	200	03/22/12 01:43 PM
Potassium	49.6	20.0	60.0	J	mg/L	200	03/22/12 01:43 PM
Selenium	0.0570	0.00200	0.00600		mg/L	1	03/19/12 07:09 PM
Silver	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 07:09 PM
Sodium	2270	20.0	60.0		mg/L	200	03/22/12 01:43 PM
SEMIVOLATILES BY GC/MS - WATER		SW8270C		Analyst: DO			

Qualifiers:

* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
RL Reporting Limit	S Spike Recovery outside control limits
N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-032-0312
Lab ID: 1203116-08
Collection Date: 03/12/12 03:40 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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SEMIVOLATILES BY GC/MS - WATER

SW8270C

Analyst: **DO**

1,2,4,5-Tetrachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
1,2-Diphenylhydrazine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
1-Chloronaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 09:37 AM
1-Methylnaphthalene	<0.000200	0.000200	0.000800	N	mg/L	1	03/18/12 03:35 PM
1-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
2,4,5-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2,4,6-Trichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2,4-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2,4-Dimethylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2,4-Dinitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 03:35 PM
2,4-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2,6-Dichlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2,6-Dinitrotoluene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2-Chloronaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2-Chlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2-Methylnaphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2-Naphthylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
2-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2-Nitrophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
2-Picoline	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
3,3'-Dichlorobenzidine	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 03:35 PM
3-Methylcholanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
3-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
4,6-Dinitro-2-methylphenol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 03:35 PM
4-Aminobiphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
4-Bromophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
4-Chloro-3-methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
4-Chloroaniline	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 03:35 PM
4-Chlorophenyl phenyl ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
4-Methylphenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
4-Nitroaniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
4-Nitrophenol	<0.00100	0.00100	0.00400		mg/L	1	03/18/12 03:35 PM
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
Acenaphthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Acenaphthylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Acetophenone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Aniline	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
MDL	Method Detection Limit	ND Not Detected at the Method Detection Limit
RL	Reporting Limit	S Spike Recovery outside control limits
N	Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-032-0312
Lab ID: 1203116-08
Collection Date: 03/12/12 03:40 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS - WATER		SW8270C			Analyst: DO		
Benzidine	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:35 PM
Benzo[a]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Benzo[a]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Benzo[b]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Benzo[g,h,i]perylene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Benzo[k]fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Benzoic acid	0.0147	0.00200	0.00600		mg/L	1	03/18/12 03:35 PM
Benzyl alcohol	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 03:35 PM
Biphenyl	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Bis(2-chloroethoxy)methane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Bis(2-chloroethyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Bis(2-chloroisopropyl)ether	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Bis(2-ethylhexyl)phthalate	<0.00100	0.00100	0.00300		mg/L	1	03/18/12 03:35 PM
Butyl benzyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:35 PM
Carbazole	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Chrysene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Di-n-butyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:35 PM
Di-n-octyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:35 PM
Dibenz(a,j)acridine	<0.00100	0.00100	0.00400	N	mg/L	1	03/19/12 09:37 AM
Dibenz[a,h]anthracene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Dibenzofuran	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Diethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:35 PM
Dimethyl phthalate	<0.00200	0.00200	0.00600		mg/L	1	03/18/12 03:35 PM
Dimethylphenethylamine	<0.00200	0.00200	0.00600		mg/L	1	03/19/12 09:37 AM
Diphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
Ethyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
Fluoranthene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Fluorene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Hexachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Hexachlorobutadiene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Hexachlorocyclopentadiene	<0.000600	0.000600	0.00200		mg/L	1	03/18/12 03:35 PM
Hexachloroethane	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Indeno[1,2,3-cd]pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Isophorone	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Methyl methanesulfonate	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
N-Nitrosodi-n-propylamine	<0.000100	0.000100	0.000800		mg/L	1	03/18/12 03:35 PM
N-Nitrosodimethylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
N-Nitrosodiphenylamine	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
N-Nitrosopiperidine	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 B Analyte detected in the associated Method Blank
 C Sample Result or QC discussed in the Case Narrative
 DF Dilution Factor
 E TPH pattern not Gas or Diesel Range Pattern
 J Analyte detected between MDL and RL
 MDL Method Detection Limit
 ND Not Detected at the Method Detection Limit
 RL Reporting Limit
 S Spike Recovery outside control limits
 N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-032-0312
Lab ID: 1203116-08
Collection Date: 03/12/12 03:40 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
SEMIVOLATILES BY GC/MS - WATER		SW8270C			Analyst: DO		
Naphthalene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Nitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
p-Dimethylaminoazobenzene	<0.000200	0.000200	0.000800	N	mg/L	1	03/19/12 09:37 AM
Pentachlorobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Pentachloronitrobenzene	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
Pentachlorophenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Phenacetin	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
Phenanthrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Phenol	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Pronamide	<0.000200	0.000200	0.000800		mg/L	1	03/19/12 09:37 AM
Pyrene	<0.000200	0.000200	0.000800		mg/L	1	03/18/12 03:35 PM
Pyridine	<0.000800	0.000800	0.00200		mg/L	1	03/18/12 03:35 PM
Surr: 2,4,6-Tribromophenol	94.8	0	42-124		%REC	1	03/19/12 09:37 AM
Surr: 2,4,6-Tribromophenol	96.5	0	42-124		%REC	1	03/18/12 03:35 PM
Surr: 2-Fluorobiphenyl	83.5	0	50-110		%REC	1	03/19/12 09:37 AM
Surr: 2-Fluorobiphenyl	95.5	0	50-110		%REC	1	03/18/12 03:35 PM
Surr: 2-Fluorophenol	63.8	0	20-110		%REC	1	03/19/12 09:37 AM
Surr: 2-Fluorophenol	65.0	0	20-110		%REC	1	03/18/12 03:35 PM
Surr: 4-Terphenyl-d14	86.2	0	51-135		%REC	1	03/19/12 09:37 AM
Surr: 4-Terphenyl-d14	98.5	0	51-135		%REC	1	03/18/12 03:35 PM
Surr: Nitrobenzene-d5	87.8	0	41-110		%REC	1	03/19/12 09:37 AM
Surr: Nitrobenzene-d5	85.5	0	41-110		%REC	1	03/18/12 03:35 PM
Surr: Phenol-d6	43.0	0	20-115		%REC	1	03/18/12 03:35 PM
Surr: Phenol-d6	44.5	0	20-115		%REC	1	03/19/12 09:37 AM
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:24 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:24 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:24 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 04:24 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level B Analyte detected in the associated Method Blank
C Sample Result or QC discussed in the Case Narrative DF Dilution Factor
E TPH pattern not Gas or Diesel Range Pattern J Analyte detected between MDL and RL
MDL Method Detection Limit ND Not Detected at the Method Detection Limit
RL Reporting Limit S Spike Recovery outside control limits
N Parameter not NELAC certified

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-032-0312
Lab ID: 1203116-08
Collection Date: 03/12/12 03:40 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
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8260 WATER VOLATILES BY GC/MS

SW8260C

Analyst: **KL**

1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:24 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 04:24 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:24 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:24 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:24 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:24 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:24 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 04:24 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:24 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:24 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:24 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM

Qualifiers:	* Value exceeds TCLP Maximum Concentration Level	B Analyte detected in the associated Method Blank
	C Sample Result or QC discussed in the Case Narrative	DF Dilution Factor
	E TPH pattern not Gas or Diesel Range Pattern	J Analyte detected between MDL and RL
	MDL Method Detection Limit	ND Not Detected at the Method Detection Limit
	RL Reporting Limit	S Spike Recovery outside control limits
	N Parameter not NELAC certified	

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-032-0312
Lab ID: 1203116-08
Collection Date: 03/12/12 03:40 PM
Matrix: AQUEOUS

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 04:24 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:24 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:24 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:24 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:24 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:24 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 04:24 PM
Surr: 1,2-Dichloroethane-d4	114	0	70-120		%REC	1	03/19/12 04:24 PM
Surr: 4-Bromofluorobenzene	106	0	75-120		%REC	1	03/19/12 04:24 PM
Surr: Dibromofluoromethane	111	0	85-115		%REC	1	03/19/12 04:24 PM
Surr: Toluene-d8	98.2	0	85-120		%REC	1	03/19/12 04:24 PM
ANIONS BY IC METHOD - WATER		E300			Analyst: JBC		
Chloride	1400	30.0	100		mg/L	100	03/14/12 12:43 PM
Sulfate	5150	100	300		mg/L	100	03/14/12 12:43 PM
ALKALINITY		M2320 B			Analyst: JBC		
Alkalinity, Bicarbonate (As CaCO3)	50.0	10.0	20.0		mg/L	1	03/13/12 02:39 PM
Alkalinity, Carbonate (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:39 PM
Alkalinity, Hydroxide (As CaCO3)	<10.0	10.0	20.0		mg/L	1	03/13/12 02:39 PM
Alkalinity, Total (As CaCO3)	50.0	10.0	20.0		mg/L	1	03/13/12 02:39 PM
PH		M4500-H+ B			Analyst: JBC		
pH	7.47	0	0		pH Units	1	03/13/12 01:43 PM
TOTAL ORGANIC CARBON		M5310C			Analyst: TGK		
Total Organic Carbon	<0.300	0.300	1.00		mg/L	1	03/14/12 01:17 PM

Qualifiers:

- * Value exceeds TCLP Maximum Concentration Level
- C Sample Result or QC discussed in the Case Narrative
- E TPH pattern not Gas or Diesel Range Pattern
- MDL Method Detection Limit
- RL Reporting Limit
- N Parameter not NELAC certified
- B Analyte detected in the associated Method Blank
- DF Dilution Factor
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-TB3-0312
Lab ID: 1203116-09
Collection Date: 03/12/12 03:40 PM
Matrix: TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
1,1,1,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,1,1-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,1,2,2-Tetrachloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,1,2-Trichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,1-Dichloroethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,1-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,1-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,2,3-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:49 PM
1,2,3-Trichloropropane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
1,2,4-Trichlorobenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:49 PM
1,2,4-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:49 PM
1,2-Dibromo-3-chloropropane	<0.00300	0.00300	0.0100		mg/L	1	03/19/12 04:49 PM
1,2-Dibromoethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,2-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
1,2-Dichloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
1,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,3,5-Trimethylbenzene	<0.00150	0.00150	0.00500		mg/L	1	03/19/12 04:49 PM
1,3-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
1,3-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
1,4-Dichloro-2-butene	<0.00200	0.00200	0.00200		mg/L	1	03/19/12 04:49 PM
1,4-Dichlorobenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
2,2-Dichloropropane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
2-Butanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:49 PM
2-Chloroethylvinylether	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:49 PM
2-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
2-Hexanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:49 PM
4-Chlorotoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
4-Methyl-2-pentanone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:49 PM
Acetone	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:49 PM
Acrylonitrile	<0.00100	0.00100	0.00300		mg/L	1	03/19/12 04:49 PM
Benzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Bromobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Bromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Bromodichloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Bromoform	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Bromomethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
Carbon disulfide	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:49 PM
Carbon tetrachloride	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Chlorobenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM

Qualifiers:

- * Value exceeds TCLP Maximum Concentration Level
- C Sample Result or QC discussed in the Case Narrative
- E TPH pattern not Gas or Diesel Range Pattern
- MDL Method Detection Limit
- RL Reporting Limit
- N Parameter not NELAC certified
- B Analyte detected in the associated Method Blank
- DF Dilution Factor
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- S Spike Recovery outside control limits

DHL Analytical

Date: 23-Mar-12

CLIENT: Zia Engineering & Environmental
Project: HELSTF Construction Landfill
Project No:
Lab Order: 1203116

Client Sample ID: HLSF-3839-HMW-TB3-0312
Lab ID: 1203116-09
Collection Date: 03/12/12 03:40 PM
Matrix: TRIP BLANK

Analyses	Result	MDL	RL	Qual	Units	DF	Date Analyzed
8260 WATER VOLATILES BY GC/MS		SW8260C			Analyst: KL		
Chloroethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
Chloroform	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
Chloromethane	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
cis-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
cis-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Dibromochloromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Dibromomethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Dichlorodifluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Ethylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
Iodomethane	<0.00500	0.00500	0.0150		mg/L	1	03/19/12 04:49 PM
Isopropylbenzene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
m,p-Xylene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:49 PM
Methyl tert-butyl ether	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
Methylene chloride	<0.00250	0.00250	0.00250		mg/L	1	03/19/12 04:49 PM
n-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
n-Propylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
o-Xylene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
p-Isopropyltoluene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
sec-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
Styrene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
tert-Butylbenzene	<0.000300	0.000300	0.00100		mg/L	1	03/19/12 04:49 PM
Tetrachloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:49 PM
Toluene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:49 PM
trans-1,2-Dichloroethene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
trans-1,3-Dichloropropene	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Trichloroethene	<0.000600	0.000600	0.00200		mg/L	1	03/19/12 04:49 PM
Trichlorofluoromethane	<0.000200	0.000200	0.00100		mg/L	1	03/19/12 04:49 PM
Vinyl chloride	<0.000100	0.000100	0.00100		mg/L	1	03/19/12 04:49 PM
Surr: 1,2-Dichloroethane-d4	104	0	70-120		%REC	1	03/19/12 04:49 PM
Surr: 4-Bromofluorobenzene	105	0	75-120		%REC	1	03/19/12 04:49 PM
Surr: Dibromofluoromethane	104	0	85-115		%REC	1	03/19/12 04:49 PM
Surr: Toluene-d8	98.8	0	85-120		%REC	1	03/19/12 04:49 PM

Qualifiers: * Value exceeds TCLP Maximum Concentration Level
 C Sample Result or QC discussed in the Case Narrative
 E TPH pattern not Gas or Diesel Range Pattern
 MDL Method Detection Limit
 RL Reporting Limit
 N Parameter not NELAC certified
 B Analyte detected in the associated Method Blank
 DF Dilution Factor
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 S Spike Recovery outside control limits

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_120318A

The QC data in batch 50939 applies to the following samples: 1203116-01H, 1203116-02H, 1203116-05H, 1203116-06H, 1203116-08H

Sample ID: LCS-50939	Batch ID: 50939	TestNo: M8015D	Units: mg/L							
SampType: LCS	Run ID: GC15_120318A	Analysis Date: 3/18/2012 9:46:54 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.16	0.100	1.250	0	92.6	50	114			
Surr: Isopropylbenzene	0.0532		0.1000		53.2	47	142			
Surr: Octacosane	0.0904		0.1000		90.4	51	124			

Sample ID: MB-50939	Batch ID: 50939	TestNo: M8015D	Units: mg/L							
SampType: MBLK	Run ID: GC15_120318A	Analysis Date: 3/18/2012 10:13:15 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	<0.0500	0.100								
Surr: Isopropylbenzene	0.0512		0.1000		51.2	47	142			
Surr: Octacosane	0.0914		0.1000		91.4	51	124			

Sample ID: 1203088-01HMS	Batch ID: 50939	TestNo: M8015D	Units: mg/L							
SampType: MS	Run ID: GC15_120318A	Analysis Date: 3/18/2012 10:30:49 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.23	0.100	1.250	0	98.1	50	114			
Surr: Isopropylbenzene	0.0575		0.1000		57.5	47	142			
Surr: Octacosane	0.0952		0.1000		95.2	51	124			

Sample ID: 1203088-01HMSD	Batch ID: 50939	TestNo: M8015D	Units: mg/L							
SampType: MSD	Run ID: GC15_120318A	Analysis Date: 3/18/2012 10:39:35 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.22	0.100	1.250	0	97.6	50	114	0.493	30	
Surr: Isopropylbenzene	0.0578		0.1000		57.8	47	142	0	0	
Surr: Octacosane	0.0925		0.1000		92.5	51	124	0	0	

Sample ID: 1203126-05EMS	Batch ID: 50939	TestNo: M8015D	Units: mg/L							
SampType: MS	Run ID: GC15_120318A	Analysis Date: 3/18/2012 12:33:38 PM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.20	0.100	1.250	0.05520	91.8	50	114			
Surr: Isopropylbenzene	0.0578		0.1000		57.8	47	142			
Surr: Octacosane	0.0940		0.1000		94.0	51	124			

- Qualifiers:**
- B Analyte detected in the associated Method Blank
 - J Analyte detected between MDL and RL
 - ND Not Detected at the Method Detection Limit
 - RL Reporting Limit
 - J Analyte detected between SDL and RL
 - DF Dilution Factor
 - MDL Method Detection Limit
 - R RPD outside accepted control limits
 - S Spike Recovery outside control limits
 - N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_120318A

Sample ID: 1203126-05EMSD	Batch ID: 50939	TestNo: M8015D	Units: mg/L
SampType: MSD	Run ID: GC15_120318A	Analysis Date: 3/18/2012 12:42:24 PM	Prep Date: 3/14/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.20	0.100	1.250	0.05520	91.5	50	114	0.288	30	
Surr: Isopropylbenzene	0.0547		0.1000		54.7	47	142	0	0	
Surr: Octacosane	0.0890		0.1000		89.0	51	124	0	0	

Qualifiers:

- B Analyte detected in the associated Method Blank
- J Analyte detected between MDL and RL
- ND Not Detected at the Method Detection Limit
- RL Reporting Limit
- J Analyte detected between SDL and RL

- DF Dilution Factor
- MDL Method Detection Limit
- R RPD outside accepted control limits
- S Spike Recovery outside control limits
- N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_120318A

The QC data in batch 50976 applies to the following samples: 1203116-071

Sample ID: LCS-50976	Batch ID: 50976	TestNo: M8015D	Units: mg/L							
SampType: LCS	Run ID: GC15_120318A	Analysis Date: 3/18/2012 9:55:41 AM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.06	0.100	1.250	0	84.9	50	114			
Surr: Isopropylbenzene	0.0508		0.1000		50.8	47	142			
Surr: Octacosane	0.0907		0.1000		90.7	51	124			

Sample ID: MB-50976	Batch ID: 50976	TestNo: M8015D	Units: mg/L							
SampType: MBLK	Run ID: GC15_120318A	Analysis Date: 3/18/2012 11:40:55 AM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.0576	0.100								
Surr: Isopropylbenzene	0.0516		0.1000		51.6	47	142			
Surr: Octacosane	0.0918		0.1000		91.8	51	124			

Sample ID: 1203146-02DMS	Batch ID: 50976	TestNo: M8015D	Units: mg/L							
SampType: MS	Run ID: GC15_120318A	Analysis Date: 3/18/2012 1:52:30 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	1.10	0.100	1.250	0.06820	82.6	50	114			
Surr: Isopropylbenzene	0.0564		0.1000		56.4	47	142			
Surr: Octacosane	0.0902		0.1000		90.2	51	124			

Sample ID: 1203146-02DMSD	Batch ID: 50976	TestNo: M8015D	Units: mg/L							
SampType: MSD	Run ID: GC15_120318A	Analysis Date: 3/18/2012 2:01:15 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	0.990	0.100	1.250	0.06820	73.7	50	114	10.6	30	
Surr: Isopropylbenzene	0.0536		0.1000		53.6	47	142	0	0	
Surr: Octacosane	0.0844		0.1000		84.4	51	124	0	0	

Qualifiers:	<p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GC15_120318A

Sample ID: ICV-120318	Batch ID: R59651	TestNo: M8015D	Units: mg/L
SampType: ICV	Run ID: GC15_120318A	Analysis Date: 3/18/2012 9:34:23 AM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	564	0.100	500.0	0	113	80	120			
Surr: Isopropylbenzene	23.4		25.00		93.8	80	120			
Surr: Octacosane	26.1		25.00		104	80	120			

Sample ID: CCV1-120318	Batch ID: R59651	TestNo: M8015D	Units: mg/L
SampType: CCV	Run ID: GC15_120318A	Analysis Date: 3/18/2012 11:23:24 AM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	280	0.100	250.0	0	112	80	120			
Surr: Isopropylbenzene	12.1		12.50		96.6	80	120			
Surr: Octacosane	13.0		12.50		104	80	120			

Sample ID: CCV2-120318	Batch ID: R59651	TestNo: M8015D	Units: mg/L
SampType: CCV	Run ID: GC15_120318A	Analysis Date: 3/18/2012 1:08:43 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	280	0.100	250.0	0	112	80	120			
Surr: Isopropylbenzene	12.1		12.50		96.6	80	120			
Surr: Octacosane	13.0		12.50		104	80	120			

Sample ID: CCV3-120318	Batch ID: R59651	TestNo: M8015D	Units: mg/L
SampType: CCV	Run ID: GC15_120318A	Analysis Date: 3/18/2012 2:53:59 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
TPH-DRO C10-C28	287	0.100	250.0	0	115	80	120			
Surr: Isopropylbenzene	12.6		12.50		100	80	120			
Surr: Octacosane	13.1		12.50		105	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_120316A

The QC data in batch 50997 applies to the following samples: 1203116-01B, 1203116-02B, 1203116-05B, 1203116-06B, 1203116-07B, 1203116-08B

Sample ID: LCS-50997	Batch ID: 50997	TestNo: M8015V	Units: mg/L							
SampType: LCS	Run ID: GC4_120316A	Analysis Date: 3/16/2012 11:11:25 AM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	5.28	0.100	5.000	0	106	67	136			
Surr: Tetrachlorethene	0.413		0.4000		103	74	138			

Sample ID: MB-50997	Batch ID: 50997	TestNo: M8015V	Units: mg/L							
SampType: MBLK	Run ID: GC4_120316A	Analysis Date: 3/16/2012 12:01:29 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	<0.0600	0.100								
Surr: Tetrachlorethene	0.442		0.4000		111	74	138			

Sample ID: 1203088-01BMS	Batch ID: 50997	TestNo: M8015V	Units: mg/L							
SampType: MS	Run ID: GC4_120316A	Analysis Date: 3/16/2012 3:23:51 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	4.97	0.100	5.000	0	99.3	67	136			
Surr: Tetrachlorethene	0.402		0.4000		101	74	138			

Sample ID: 1203088-01BMSD	Batch ID: 50997	TestNo: M8015V	Units: mg/L							
SampType: MSD	Run ID: GC4_120316A	Analysis Date: 3/16/2012 3:50:02 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	4.94	0.100	5.000	0	98.8	67	136	0.512	30	
Surr: Tetrachlorethene	0.409		0.4000		102	74	138	0	0	

Qualifiers:	<p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GC4_120316A

Sample ID: ICV-120316	Batch ID: R59634	TestNo: M8015V	Units: mg/L							
SampType: ICV	Run ID: GC4_120316A	Analysis Date: 3/16/2012 10:45:16 AM	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	10.3	0.100	10.00	0	103	80	120			
Surr: Tetrachlorethene	0.419		0.4000		105	74	138			

Sample ID: CCV1-120316	Batch ID: R59634	TestNo: M8015V	Units: mg/L							
SampType: CCV	Run ID: GC4_120316A	Analysis Date: 3/16/2012 4:14:51 PM	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Gasoline Range Organics	5.20	0.100	5.000	0	104	80	120			
Surr: Tetrachlorethene	0.408		0.4000		102	74	138			

<p>Qualifiers:</p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_120319A

The QC data in batch 50979 applies to the following samples: 1203116-01D, 1203116-02D, 1203116-05D, 1203116-06D, 1203116-07D, 1203116-08D

Sample ID: MB-50979	Batch ID: 50979	TestNo: SW7470A	Units: mg/L							
SampType: MBLK	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 1:56:23 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000600	0.000200								

Sample ID: LCS-50979	Batch ID: 50979	TestNo: SW7470A	Units: mg/L							
SampType: LCS	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 2:06:35 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00214	0.000200	0.00200	0	107	85	115			

Sample ID: LCSD-50979	Batch ID: 50979	TestNo: SW7470A	Units: mg/L							
SampType: LCSD	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 2:08:38 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00204	0.000200	0.00200	0	102	85	115	4.78	15	

Sample ID: 1203088-01D SD	Batch ID: 50979	TestNo: SW7470A	Units: mg/L							
SampType: SD	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:00:56 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.000300	0.00100	0	0				0	10	

Sample ID: 1203088-01D PDS	Batch ID: 50979	TestNo: SW7470A	Units: mg/L							
SampType: PDS	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:03:01 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00232	0.000200	0.00250	0	92.8	85	115			

Sample ID: 1203088-01D MS	Batch ID: 50979	TestNo: SW7470A	Units: mg/L							
SampType: MS	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:09:15 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00213	0.000200	0.00200	0	106	80	120			

Sample ID: 1203088-01D MSD	Batch ID: 50979	TestNo: SW7470A	Units: mg/L							
SampType: MSD	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:11:19 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00212	0.000200	0.00200	0	106	80	120	0.471	15	

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_120319A

The QC data in batch 50994 applies to the following samples: 1203116-01E, 1203116-02E, 1203116-05E, 1203116-06E, 1203116-07E, 1203116-08E

Sample ID: 1203088-01E SD	Batch ID: 50994	TestNo: SW7470A	Units: mg/L							
SampType: SD	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:27:58 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.000300	0.00100	0	0				0	10	

Sample ID: 1203088-01E PDS	Batch ID: 50994	TestNo: SW7470A	Units: mg/L							
SampType: PDS	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:34:13 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00244	0.000200	0.00250	0	97.6	85	115			

Sample ID: 1203088-01E MS	Batch ID: 50994	TestNo: SW7470A	Units: mg/L							
SampType: MS	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:36:17 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00225	0.000200	0.00200	0	112	80	120			

Sample ID: 1203088-01E MSD	Batch ID: 50994	TestNo: SW7470A	Units: mg/L							
SampType: MSD	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:38:23 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00215	0.000200	0.00200	0	108	80	120	4.55	15	

The QC data in batch 50994 applies to the following samples: 1203116-01E, 1203116-02E, 1203116-05E, 1203116-06E, 1203116-07E, 1203116-08E

Sample ID: MB-50994	Batch ID: 50994	TestNo: SW7470A	Units: mg/L							
SampType: MBLK	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 1:58:25 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000600	0.000200								

Sample ID: Filter Blank-50994	Batch ID: 50994	TestNo: SW7470A	Units: mg/L							
SampType: MBLK	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 2:00:28 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	<0.0000600	0.000200								

Sample ID: LCS-50994	Batch ID: 50994	TestNo: SW7470A	Units: mg/L							
SampType: LCS	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 2:10:41 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00213	0.000200	0.00200	0	106	85	115			

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| <p>Qualifiers:</p> <ul style="list-style-type: none"> B Analyte detected in the associated Method Blank J Analyte detected between MDL and RL ND Not Detected at the Method Detection Limit RL Reporting Limit J Analyte detected between SDL and RL | <ul style="list-style-type: none"> DF Dilution Factor MDL Method Detection Limit R RPD outside accepted control limits S Spike Recovery outside control limits N Parameter not NELAC certified |
|--|---|

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_120319A

Sample ID: LCSD-50994	Batch ID: 50994	TestNo: SW7470A	Units: mg/L							
SampType: LCSD	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 2:38:11 PM	Prep Date: 3/16/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Mercury	0.00226	0.000200	0.00200	0	113	85	115	5.92	15	

Qualifiers:	B Analyte detected in the associated Method Blank	DF Dilution Factor	
	J Analyte detected between MDL and RL	MDL Method Detection Limit	
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits	
	RL Reporting Limit	S Spike Recovery outside control limits	
	J Analyte detected between SDL and RL	N Parameter not NELAC certified	

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: CETAC_HG_120319A

Sample ID: ICV-120319	Batch ID: R59667	TestNo: SW7470A	Units: mg/L
SampType: ICV	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 1:48:13 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Mercury	0.00386	0.000200	0.00400	0	96.5	90	110			
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Sample ID: CCV1-120319	Batch ID: R59667	TestNo: SW7470A	Units: mg/L
SampType: CCV	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 2:12:45 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Mercury	0.00191	0.000200	0.00200	0	95.5	90	110			
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Sample ID: CCV2-120319	Batch ID: R59667	TestNo: SW7470A	Units: mg/L
SampType: CCV	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 2:40:16 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Mercury	0.00205	0.000200	0.00200	0	103	90	110			
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Sample ID: CCV3-120319	Batch ID: R59667	TestNo: SW7470A	Units: mg/L
SampType: CCV	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:05:06 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Mercury	0.00204	0.000200	0.00200	0	102	90	110			
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Sample ID: CCV4-120319	Batch ID: R59667	TestNo: SW7470A	Units: mg/L
SampType: CCV	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:30:03 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Mercury	0.00199	0.000200	0.00200	0	99.5	90	110			
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Sample ID: CCV5-120319	Batch ID: R59667	TestNo: SW7470A	Units: mg/L
SampType: CCV	Run ID: CETAC_HG_120319A	Analysis Date: 3/19/2012 3:53:01 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
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Mercury	0.00205	0.000200	0.00200	0	103	90	110			
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Qualifiers: B Analyte detected in the associated Method Blank J Analyte detected between MDL and RL ND Not Detected at the Method Detection Limit RL Reporting Limit J Analyte detected between SDL and RL	DF Dilution Factor MDL Method Detection Limit R RPD outside accepted control limits S Spike Recovery outside control limits N Parameter not NELAC certified
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_120319B

The QC data in batch 50958 applies to the following samples: 1203116-01D, 1203116-02D, 1203116-05D, 1203116-06D, 1203116-07D, 1203116-08D

Sample ID: MB-50958	Batch ID: 50958	TestNo: SW6020	Units: mg/L
SampType: MBLK	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 6:05:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.00200	0.00600								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00600								
Lead	<0.000300	0.00100								
Magnesium	<0.100	0.300								
Potassium	<0.100	0.300								
Selenium	<0.00200	0.00600								
Silver	<0.000600	0.00200								

Sample ID: LCS-50958	Batch ID: 50958	TestNo: SW6020	Units: mg/L
SampType: LCS	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 6:11:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.201	0.00600	0.200	0	101	80	120			
Barium	0.200	0.0100	0.200	0	99.8	80	120			
Cadmium	0.204	0.00100	0.200	0	102	80	120			
Chromium	0.215	0.00600	0.200	0	107	80	120			
Lead	0.204	0.00100	0.200	0	102	80	120			
Magnesium	5.00	0.300	5.00	0	99.9	80	120			
Potassium	4.98	0.300	5.00	0	99.6	80	120			
Selenium	0.202	0.00600	0.200	0	101	80	120			
Silver	0.212	0.00200	0.200	0	106	80	120			

Sample ID: LCSD-50958	Batch ID: 50958	TestNo: SW6020	Units: mg/L
SampType: LCSD	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 6:16:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.200	0.00600	0.200	0	99.8	80	120	0.898	15	
Barium	0.202	0.0100	0.200	0	101	80	120	1.39	15	
Cadmium	0.207	0.00100	0.200	0	104	80	120	1.71	15	
Chromium	0.212	0.00600	0.200	0	106	80	120	1.22	15	
Lead	0.207	0.00100	0.200	0	104	80	120	1.71	15	
Magnesium	5.03	0.300	5.00	0	101	80	120	0.619	15	
Potassium	5.05	0.300	5.00	0	101	80	120	1.34	15	
Selenium	0.203	0.00600	0.200	0	102	80	120	0.889	15	
Silver	0.215	0.00200	0.200	0	107	80	120	1.31	15	

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_120319B

Sample ID: 1203088-01D SD	Batch ID: 50958	TestNo: SW6020	Units: mg/L
SampType: SD	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 6:34:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0121	0.0300	0	0.0123				1.97	10	
Barium	<0.0150	0.0500	0	0.0107				0	10	
Cadmium	<0.00150	0.00500	0	0				0	10	
Chromium	0.0174	0.0300	0	0.0162				7.41	10	
Lead	<0.00150	0.00500	0	0				0	10	
Selenium	0.0618	0.0300	0	0.0734				17.1	10	R
Silver	<0.00300	0.0100	0	0				0	10	

Sample ID: 1203088-01D PDS	Batch ID: 50958	TestNo: SW6020	Units: mg/L
SampType: PDS	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 7:15:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.191	0.00600	0.200	0.0123	89.5	75	125			
Barium	0.210	0.0100	0.200	0.0107	99.6	75	125			
Cadmium	0.170	0.00100	0.200	0	84.8	75	125			
Chromium	0.186	0.00600	0.200	0.0162	84.7	75	125			
Lead	0.209	0.00100	0.200	0	105	75	125			
Selenium	0.258	0.00600	0.200	0.0734	92.3	75	125			
Silver	0.163	0.00200	0.200	0	81.4	75	125			

Sample ID: 1203088-01D MS	Batch ID: 50958	TestNo: SW6020	Units: mg/L
SampType: MS	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 7:20:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.215	0.00600	0.200	0.0123	101	80	120			
Barium	0.201	0.0100	0.200	0.0107	95.2	80	120			
Cadmium	0.163	0.00100	0.200	0	81.5	80	120			
Chromium	0.198	0.00600	0.200	0.0162	90.9	80	120			
Lead	0.203	0.00100	0.200	0	102	80	120			
Potassium	61.9	0.300	5.00	61.2	13.2	80	120			S
Selenium	0.294	0.00600	0.200	0.0734	110	80	120			
Silver	0.168	0.00200	0.200	0	84.2	80	120			

Sample ID: 1203088-01D MSD	Batch ID: 50958	TestNo: SW6020	Units: mg/L
SampType: MSD	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 7:26:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.201	0.00600	0.200	0.0123	94.6	80	120	6.44	15	
Barium	0.212	0.0100	0.200	0.0107	101	80	120	5.14	15	
Cadmium	0.170	0.00100	0.200	0	84.8	80	120	3.97	15	
Chromium	0.197	0.00600	0.200	0.0162	90.2	80	120	0.710	15	

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_120319B

Sample ID: 1203088-01D MSD	Batch ID: 50958	TestNo: SW6020	Units: mg/L
SampType: MSD	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 7:26:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Lead	0.213	0.00100	0.200	0	106	80	120	4.61	15	
Potassium	60.3	0.300	5.00	61.2	-19.4	80	120	2.67	15	S
Selenium	0.263	0.00600	0.200	0.0734	94.8	80	120	11.0	15	
Silver	0.177	0.00200	0.200	0	88.6	80	120	5.09	15	

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_120319B

Sample ID: ICV2-120319	Batch ID: R59662	TestNo: SW6020	Units: mg/L
SampType: ICV	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 5:41:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0953	0.00600	0.100	0	95.3	90	110			
Barium	0.0986	0.0100	0.100	0	98.6	90	110			
Cadmium	0.100	0.00100	0.100	0	100	90	110			
Chromium	0.104	0.00600	0.100	0	104	90	110			
Lead	0.0971	0.00100	0.100	0	97.1	90	110			
Magnesium	2.44	0.300	2.50	0	97.4	90	110			
Potassium	2.44	0.300	2.50	0	97.7	90	110			
Selenium	0.0998	0.00600	0.100	0	99.8	90	110			
Silver	0.104	0.00200	0.100	0	104	90	110			

Sample ID: CCV3-120319	Batch ID: R59662	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS2_120319B	Analysis Date: 3/19/2012 7:38:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.204	0.00600	0.200	0	102	90	110			
Barium	0.209	0.0100	0.200	0	104	90	110			
Cadmium	0.207	0.00100	0.200	0	104	90	110			
Chromium	0.215	0.00600	0.200	0	107	90	110			
Lead	0.211	0.00100	0.200	0	105	90	110			
Magnesium	5.50	0.300	5.00	0	110	90	110			
Potassium	5.50	0.300	5.00	0	110	90	110			
Selenium	0.211	0.00600	0.200	0	106	90	110			
Silver	0.219	0.00200	0.200	0	109	90	110			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS2_120321B

Sample ID: ICV1-120321	Batch ID: R59716	TestNo: SW6020	Units: mg/L
SampType: ICV	Run ID: ICP-MS2_120321B	Analysis Date: 3/21/2012 12:31:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.100	0.00600	0.100	0	100	90	110			
Calcium	2.58	0.300	2.50	0	103	90	110			
Chromium	0.107	0.00600	0.100	0	107	90	110			
Magnesium	2.52	0.300	2.50	0	101	90	110			
Potassium	2.57	0.300	2.50	0	103	90	110			
Selenium	0.104	0.00600	0.100	0	104	90	110			
Sodium	2.56	0.300	2.50	0	102	90	110			

Sample ID: CCV1-120321	Batch ID: R59716	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS2_120321B	Analysis Date: 3/21/2012 2:54:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	4.97	0.300	5.00	0	99.5	90	110			
Magnesium	4.75	0.300	5.00	0	95.0	90	110			
Sodium	4.89	0.300	5.00	0	97.7	90	110			

Sample ID: CCV2-120321	Batch ID: R59716	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS2_120321B	Analysis Date: 3/21/2012 4:18:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.202	0.00600	0.200	0	101	90	110			
Calcium	5.08	0.300	5.00	0	102	90	110			
Chromium	0.207	0.00600	0.200	0	103	90	110			
Magnesium	4.89	0.300	5.00	0	97.8	90	110			
Potassium	4.93	0.300	5.00	0	98.5	90	110			
Selenium	0.205	0.00600	0.200	0	103	90	110			
Sodium	5.04	0.300	5.00	0	101	90	110			

Sample ID: CCV3-120321	Batch ID: R59716	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS2_120321B	Analysis Date: 3/21/2012 5:05:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.18	0.300	5.00	0	104	90	110			

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120319B

The QC data in batch 50959 applies to the following samples: 1203116-01E, 1203116-02E, 1203116-05E, 1203116-06E, 1203116-07E, 1203116-08E

Sample ID: MB-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L
SampType: MBLK	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 2:24:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.00200	0.00600								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00600								
Lead	<0.000300	0.00100								
Potassium	<0.100	0.300								
Selenium	<0.00200	0.00600								
Silver	<0.000600	0.00200								

Sample ID: Filter Blank-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L
SampType: MBLK	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 2:30:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	<0.00200	0.00600								
Barium	<0.00300	0.0100								
Cadmium	<0.000300	0.00100								
Chromium	<0.00200	0.00600								
Lead	<0.000300	0.00100								
Potassium	<0.100	0.300								
Selenium	<0.00200	0.00600								
Silver	<0.000600	0.00200								

Sample ID: LCS-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L
SampType: LCS	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 2:36:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.199	0.00600	0.200	0	99.6	80	120			
Barium	0.199	0.0100	0.200	0	99.6	80	120			
Cadmium	0.199	0.00100	0.200	0	99.6	80	120			
Chromium	0.203	0.00600	0.200	0	101	80	120			
Lead	0.204	0.00100	0.200	0	102	80	120			
Potassium	4.90	0.300	5.00	0	98.0	80	120			
Selenium	0.208	0.00600	0.200	0	104	80	120			
Silver	0.196	0.00200	0.200	0	98.0	80	120			

Sample ID: LCSD-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L
SampType: LCSD	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 2:41:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.198	0.00600	0.200	0	98.8	80	120	0.756	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120319B

Sample ID: LCSD-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L
SampType: LCSD	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 2:41:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Barium	0.201	0.0100	0.200	0	101	80	120	0.900	15	
Cadmium	0.199	0.00100	0.200	0	99.7	80	120	0.151	15	
Chromium	0.204	0.00600	0.200	0	102	80	120	0.737	15	
Lead	0.208	0.00100	0.200	0	104	80	120	2.03	15	
Potassium	5.00	0.300	5.00	0	100	80	120	2.10	15	
Selenium	0.208	0.00600	0.200	0	104	80	120	0.048	15	
Silver	0.198	0.00200	0.200	0	99.2	80	120	1.27	15	

Sample ID: 1203088-01E SD	Batch ID: 50959	TestNo: SW6020	Units: mg/L
SampType: SD	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 2:58:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.0119	0.0300	0	0.0122				2.28	10	
Barium	<0.0150	0.0500	0	0.00924				0	10	
Cadmium	<0.00150	0.00500	0	0				0	10	
Chromium	0.0158	0.0300	0	0.0148				6.51	10	
Lead	<0.00150	0.00500	0	0				0	10	
Selenium	0.0578	0.0300	0	0.0721				22.0	10	R
Silver	<0.00300	0.0100	0	0				0	10	

Sample ID: 1203088-01E PDS	Batch ID: 50959	TestNo: SW6020	Units: mg/L
SampType: PDS	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 3:37:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.222	0.00600	0.200	0.0122	105	75	125			
Barium	0.212	0.0100	0.200	0.00924	102	75	125			
Cadmium	0.174	0.00100	0.200	0	86.9	75	125			
Chromium	0.199	0.00600	0.200	0.0148	92.3	75	125			
Lead	0.208	0.00100	0.200	0	104	75	125			
Selenium	0.306	0.00600	0.200	0.0721	117	75	125			
Silver	0.171	0.00200	0.200	0	85.3	75	125			

Sample ID: 1203088-01E MS	Batch ID: 50959	TestNo: SW6020	Units: mg/L
SampType: MS	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 3:43:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.229	0.00600	0.200	0.0122	108	80	120			
Barium	0.214	0.0100	0.200	0.00924	102	80	120			
Cadmium	0.178	0.00100	0.200	0	88.8	80	120			
Chromium	0.202	0.00600	0.200	0.0148	93.7	80	120			
Lead	0.209	0.00100	0.200	0	104	80	120			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120319B

Sample ID: 1203088-01E MS	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: MS	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 3:43:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Potassium	61.6	0.300	5.00	56.2	109	80	120			
Selenium	0.296	0.00600	0.200	0.0721	112	80	120			
Silver	0.177	0.00200	0.200	0	88.4	80	120			

Sample ID: 1203088-01E MSD	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: MSD	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 3:49:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.231	0.00600	0.200	0.0122	110	80	120	1.09	15	
Barium	0.214	0.0100	0.200	0.00924	102	80	120	0	15	
Cadmium	0.177	0.00100	0.200	0	88.4	80	120	0.452	15	
Chromium	0.195	0.00600	0.200	0.0148	90.0	80	120	3.68	15	
Lead	0.210	0.00100	0.200	0	105	80	120	0.525	15	
Potassium	58.7	0.300	5.00	56.2	50.4	80	120	4.84	15	S
Selenium	0.304	0.00600	0.200	0.0721	116	80	120	2.64	15	
Silver	0.177	0.00200	0.200	0	88.4	80	120	0.113	15	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120319B

Sample ID: ICV1-120319	Batch ID: R59657	TestNo: SW6020	Units: mg/L
SampType: ICV	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 11:50:00 AM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.101	0.00600	0.100	0	101	90	110			
Barium	0.103	0.0100	0.100	0	103	90	110			
Cadmium	0.100	0.00100	0.100	0	100	90	110			
Chromium	0.108	0.00600	0.100	0	108	90	110			
Lead	0.103	0.00100	0.100	0	103	90	110			
Potassium	2.57	0.300	2.50	0	103	90	110			
Selenium	0.103	0.00600	0.100	0	103	90	110			
Silver	0.0978	0.00200	0.100	0	97.8	90	110			

Sample ID: CCV1-120319	Batch ID: R59657	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 1:55:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.196	0.00600	0.200	0	98.0	90	110			
Barium	0.191	0.0100	0.200	0	95.4	90	110			
Cadmium	0.191	0.00100	0.200	0	95.5	90	110			
Chromium	0.204	0.00600	0.200	0	102	90	110			
Lead	0.196	0.00100	0.200	0	98.2	90	110			
Potassium	5.14	0.300	5.00	0	103	90	110			
Selenium	0.202	0.00600	0.200	0	101	90	110			
Silver	0.191	0.00200	0.200	0	95.3	90	110			

Sample ID: CCV2-120319	Batch ID: R59657	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS3_120319B	Analysis Date: 3/19/2012 4:06:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Arsenic	0.204	0.00600	0.200	0	102	90	110			
Barium	0.197	0.0100	0.200	0	98.6	90	110			
Cadmium	0.194	0.00100	0.200	0	96.8	90	110			
Chromium	0.203	0.00600	0.200	0	102	90	110			
Lead	0.200	0.00100	0.200	0	100	90	110			
Potassium	5.32	0.300	5.00	0	106	90	110			
Selenium	0.192	0.00600	0.200	0	96.1	90	110			
Silver	0.196	0.00200	0.200	0	98.0	90	110			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120320B

The QC data in batch 50958 applies to the following samples: 1203116-01D, 1203116-02D, 1203116-05D, 1203116-06D, 1203116-07D, 1203116-08D

Sample ID: MB-50958	Batch ID: 50958	TestNo: SW6020	Units: mg/L							
SampType: MBLK	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 1:57:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	<0.100	0.300								
Sodium	<0.100	0.300								

Sample ID: LCS-50958	Batch ID: 50958	TestNo: SW6020	Units: mg/L							
SampType: LCS	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 2:14:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.00	0.300	5.00	0	100	80	120			
Sodium	5.00	0.300	5.00	0	100	80	120			

Sample ID: LCSD-50958	Batch ID: 50958	TestNo: SW6020	Units: mg/L							
SampType: LCSD	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 2:19:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.12	0.300	5.00	0	102	80	120	2.27	15	
Sodium	4.98	0.300	5.00	0	99.6	80	120	0.481	15	

Sample ID: 1203088-01D SD	Batch ID: 50958	TestNo: SW6020	Units: mg/L							
SampType: SD	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 2:47:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	440	300	0	459				4.12	10	
Magnesium	699	300	0	692				1.08	10	
Potassium	<100	300	0	63.7				0	10	
Sodium	2680	300	0	2570				4.19	10	

Sample ID: 1203088-01D PDS	Batch ID: 50958	TestNo: SW6020	Units: mg/L							
SampType: PDS	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 3:21:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	1500	60.0	1000	459	104	75	125			
Magnesium	1680	60.0	1000	692	99.0	75	125			
Potassium	1060	60.0	1000	63.7	100	75	125			
Sodium	3610	60.0	1000	2570	105	75	125			

Sample ID: 1203088-01D MS	Batch ID: 50958	TestNo: SW6020	Units: mg/L							
SampType: MS	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 3:32:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	450	60.0	5.00	459	-184	80	120			S

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120320B

Sample ID: 1203088-01D MS	Batch ID: 50958	TestNo: SW6020	Units: mg/L							
SampType: MS	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 3:32:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Magnesium	679	60.0	5.00	692	-260	80	120			S
Potassium	67.7	60.0	5.00	63.7	79.2	80	120			S
Sodium	2520	60.0	5.00	2570	-1000	80	120			S

Sample ID: 1203088-01D MSD	Batch ID: 50958	TestNo: SW6020	Units: mg/L							
SampType: MSD	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 3:38:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	442	60.0	5.00	459	-336	80	120	1.70	15	S
Magnesium	680	60.0	5.00	692	-236	80	120	0.177	15	S
Potassium	66.7	60.0	5.00	63.7	59.6	80	120	1.46	15	S
Sodium	2520	60.0	5.00	2570	-1040	80	120	0.079	15	S

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120320B

The QC data in batch 50959 applies to the following samples: 1203116-01E, 1203116-02E, 1203116-05E, 1203116-06E, 1203116-07E, 1203116-08E

Sample ID: MB-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: MBLK	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 2:02:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	<0.100	0.300								
Magnesium	<0.100	0.300								
Sodium	<0.100	0.300								

Sample ID: Filter Blank-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: MBLK	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 2:08:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	<0.100	0.300								
Magnesium	<0.100	0.300								
Sodium	<0.100	0.300								

Sample ID: LCS-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: LCS	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 2:25:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.10	0.300	5.00	0	102	80	120			
Magnesium	4.98	0.300	5.00	0	99.7	80	120			
Sodium	4.98	0.300	5.00	0	99.7	80	120			

Sample ID: LCSD-50959	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: LCSD	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 2:30:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.10	0.300	5.00	0	102	80	120	0.098	15	
Magnesium	4.98	0.300	5.00	0	99.6	80	120	0.040	15	
Sodium	4.93	0.300	5.00	0	98.6	80	120	1.09	15	

Sample ID: 1203088-01E SD	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: SD	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 2:59:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	447	300	0	450				0.602	10	
Magnesium	681	300	0	694				1.91	10	
Potassium	<100	300	0	64.5				0	10	
Sodium	2670	300	0	2570				3.77	10	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120320B

Sample ID: 1203088-01E PDS	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: PDS	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 3:27:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	1500	60.0	1000	450	105	75	125			
Magnesium	1670	60.0	1000	694	97.3	75	125			
Potassium	1060	60.0	1000	64.5	99.7	75	125			
Sodium	3540	60.0	1000	2570	96.2	75	125			

Sample ID: 1203088-01E MS	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: MS	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 3:44:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	453	60.0	5.00	450	72.0	80	120			S
Magnesium	708	60.0	5.00	694	284	80	120			S
Potassium	70.0	60.0	5.00	64.5	110	80	120			
Sodium	2610	60.0	5.00	2570	640	80	120			S

Sample ID: 1203088-01E MSD	Batch ID: 50959	TestNo: SW6020	Units: mg/L							
SampType: MSD	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 3:49:00 PM	Prep Date: 3/15/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	442	60.0	5.00	450	-156	80	120	2.55	15	S
Magnesium	672	60.0	5.00	694	-440	80	120	5.24	15	S
Potassium	64.1	60.0	5.00	64.5	-7.20	80	120	8.77	15	S
Sodium	2490	60.0	5.00	2570	-1720	80	120	4.63	15	S

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120320B

Sample ID: ICV1-120320	Batch ID: R59686	TestNo: SW6020	Units: mg/L
SampType: ICV	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 11:46:00 AM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2.61	0.300	2.50	0	104	90	110			
Magnesium	2.65	0.300	2.50	0	106	90	110			
Potassium	2.55	0.300	2.50	0	102	90	110			
Sodium	2.65	0.300	2.50	0	106	90	110			

Sample ID: CCV1-120320	Batch ID: R59686	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 1:25:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.38	0.300	5.00	0	108	90	110			
Magnesium	5.12	0.300	5.00	0	102	90	110			
Potassium	5.11	0.300	5.00	0	102	90	110			
Sodium	5.19	0.300	5.00	0	104	90	110			

Sample ID: CCV2-120320	Batch ID: R59686	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS3_120320B	Analysis Date: 3/20/2012 3:55:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.14	0.300	5.00	0	103	90	110			
Magnesium	5.14	0.300	5.00	0	103	90	110			
Potassium	5.07	0.300	5.00	0	101	90	110			
Sodium	5.26	0.300	5.00	0	105	90	110			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: ICP-MS3_120322B

Sample ID: ICV1-120322	Batch ID: R59728	TestNo: SW6020	Units: mg/L
SampType: ICV	Run ID: ICP-MS3_120322B	Analysis Date: 3/22/2012 12:06:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	2.65	0.300	2.50	0	106	90	110			
Magnesium	2.60	0.300	2.50	0	104	90	110			
Potassium	2.58	0.300	2.50	0	103	90	110			
Sodium	2.60	0.300	2.50	0	104	90	110			

Sample ID: CCV1-120322	Batch ID: R59728	TestNo: SW6020	Units: mg/L
SampType: CCV	Run ID: ICP-MS3_120322B	Analysis Date: 3/22/2012 2:39:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Calcium	5.44	0.300	5.00	0	109	90	110			
Magnesium	5.31	0.300	5.00	0	106	90	110			
Potassium	5.52	0.300	5.00	0	110	90	110			
Sodium	5.46	0.300	5.00	0	109	90	110			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318A

The QC data in batch 50965 applies to the following samples: 1203116-01G, 1203116-02G, 1203116-05G, 1203116-06G, 1203116-07H, 1203116-08G

Sample ID: LCS-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: LCS	Run ID: GCMS9_120318A	Analysis Date: 3/19/2012 12:47:00 AM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1-Chloronaphthalene	0.00657	0.000800	0.00800	0	82.2	45	125			N
1-Naphthylamine	0.00578	0.000800	0.00800	0	72.3	45	125			
2-Naphthylamine	0.00568	0.000800	0.00800	0	71.0	45	125			
2-Picoline	0.00525	0.000800	0.00800	0	65.6	45	125			
3-Methylcholanthrene	0.00737	0.000800	0.00800	0	92.2	45	125			
4-Aminobiphenyl	0.00402	0.000800	0.00800	0	50.2	45	125			
7,12-Dimethylbenz(a)anthracene	0.00683	0.000800	0.00800	0	85.4	45	125			
Dibenz(a,j)acridine	0.00734	0.00400	0.00800	0	91.8	45	125			N
Dimethylphenethylamine	0.00520	0.00600	0.00800	0	65.0	45	125			
Diphenylamine	0.0118	0.000800	0.0160	0	73.6	45	125			
Ethyl methanesulfonate	0.00594	0.000800	0.00800	0	74.2	45	125			
Methyl methanesulfonate	0.00498	0.000800	0.00800	0	62.3	45	125			
N-Nitrosopiperidine	0.00665	0.000800	0.00800	0	83.1	45	125			
p-Dimethylaminoazobenzene	0.00757	0.000800	0.00800	0	94.6	45	125			N
Pentachloronitrobenzene	0.00786	0.000800	0.00800	0	98.3	45	125			
Phenacetin	0.00761	0.000800	0.00800	0	95.1	45	125			
Pronamide	0.00792	0.000800	0.00800	0	99.1	45	125			
Surr: 2,4,6-Tribromophenol	16.1		16.00		101	42	124			
Surr: 2-Fluorobiphenyl	13.5		16.00		84.5	50	110			
Surr: 2-Fluorophenol	11.2		16.00		70.2	20	110			
Surr: 4-Terphenyl-d14	14.0		16.00		87.3	51	135			
Surr: Nitrobenzene-d5	14.3		16.00		89.5	41	110			
Surr: Phenol-d6	7.20		16.00		45.0	20	115			

Sample ID: LCSD-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: LCSD	Run ID: GCMS9_120318A	Analysis Date: 3/19/2012 1:10:00 AM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1-Chloronaphthalene	0.00620	0.000800	0.00800	0	77.4	45	125	5.89	30	N
1-Naphthylamine	0.00603	0.000800	0.00800	0	75.4	45	125	4.13	30	
2-Naphthylamine	0.00646	0.000800	0.00800	0	80.8	45	125	13.0	30	
2-Picoline	0.00401	0.000800	0.00800	0	50.2	45	125	26.7	30	
3-Methylcholanthrene	0.00738	0.000800	0.00800	0	92.3	45	125	0.163	30	
4-Aminobiphenyl	0.00485	0.000800	0.00800	0	60.6	45	125	18.9	30	
7,12-Dimethylbenz(a)anthracene	0.00685	0.000800	0.00800	0	85.6	45	125	0.292	30	
Dibenz(a,j)acridine	0.00704	0.00400	0.00800	0	88.0	45	125	4.17	30	N
Dimethylphenethylamine	0.000320	0.00600	0.00800	0	4.00	45	125	177	30	SR
Diphenylamine	0.0120	0.000800	0.0160	0	75.0	45	125	1.95	30	
Ethyl methanesulfonate	0.00600	0.000800	0.00800	0	75.0	45	125	1.01	30	
Methyl methanesulfonate	0.00522	0.000800	0.00800	0	65.2	45	125	4.55	30	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318A

Sample ID: LCSD-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: LCSD	Run ID: GCMS9_120318A	Analysis Date: 3/19/2012 1:10:00 AM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
N-Nitrosopiperidine	0.00672	0.000800	0.00800	0	84.0	45	125	1.02	30	
p-Dimethylaminoazobenzene	0.00753	0.000800	0.00800	0	94.2	45	125	0.477	30	N
Pentachloronitrobenzene	0.00783	0.000800	0.00800	0	97.9	45	125	0.459	30	
Phenacetin	0.00766	0.000800	0.00800	0	95.8	45	125	0.733	30	
Pronamide	0.00786	0.000800	0.00800	0	98.3	45	125	0.760	30	
Surr: 2,4,6-Tribromophenol	15.9		16.00		99.5	42	124	0	0	
Surr: 2-Fluorobiphenyl	13.6		16.00		85.0	50	110	0	0	
Surr: 2-Fluorophenol	11.6		16.00		72.2	20	110	0	0	
Surr: 4-Terphenyl-d14	13.7		16.00		85.5	51	135	0	0	
Surr: Nitrobenzene-d5	14.3		16.00		89.5	41	110	0	0	
Surr: Phenol-d6	7.56		16.00		47.2	20	115	0	0	

Sample ID: MB-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: MBLK	Run ID: GCMS9_120318A	Analysis Date: 3/19/2012 4:37:00 AM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1-Chloronaphthalene	<0.000200	0.000800								N
1-Naphthylamine	<0.000200	0.000800								
2-Naphthylamine	<0.000200	0.000800								
2-Picoline	<0.000200	0.000800								
3-Methylcholanthrene	<0.000200	0.000800								
4-Aminobiphenyl	<0.000200	0.000800								
7,12-Dimethylbenz(a)anthracene	<0.000200	0.000800								
Dibenz(a,j)acridine	<0.00100	0.00400								N
Dimethylphenethylamine	<0.00200	0.00600								
Diphenylamine	<0.000200	0.000800								
Ethyl methanesulfonate	<0.000200	0.000800								
Methyl methanesulfonate	<0.000200	0.000800								
N-Nitrosopiperidine	<0.000200	0.000800								
p-Dimethylaminoazobenzene	<0.000200	0.000800								N
Pentachloronitrobenzene	<0.000200	0.000800								
Phenacetin	<0.000200	0.000800								
Pronamide	<0.000200	0.000800								
Surr: 2,4,6-Tribromophenol	13.4		16.00		84.0	42	124			
Surr: 2-Fluorobiphenyl	12.0		16.00		75.2	50	110			
Surr: 2-Fluorophenol	8.64		16.00		54.0	20	110			
Surr: 4-Terphenyl-d14	12.0		16.00		74.8	51	135			
Surr: Nitrobenzene-d5	12.6		16.00		78.5	41	110			
Surr: Phenol-d6	5.64		16.00		35.2	20	115			

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318A

Sample ID: ICV2-120319	Batch ID: R59643	TestNo: SW8270C	Units: mg/L
SampType: ICV	Run ID: GCMS9_120318A	Analysis Date: 3/18/2012 11:15:00 PM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1-Chloronaphthalene	3.67	0.000800	4.00	0	91.8	80	120			N
1-Naphthylamine	3.86	0.000800	4.00	0	96.4	80	120			
2-Naphthylamine	3.80	0.000800	4.00	0	95.0	80	120			
2-Picoline	3.62	0.000800	4.00	0	90.5	80	120			
3-Methylcholanthrene	4.11	0.000800	4.00	0	103	80	120			
4-Aminobiphenyl	3.85	0.000800	4.00	0	96.2	80	120			
7,12-Dimethylbenz(a)anthracene	3.92	0.000800	4.00	0	97.9	80	120			
Dibenz(a,j)acridine	4.15	0.00400	4.00	0	104	80	120			N
Dimethylphenethylamine	4.00	0.00600	4.00	0	100	80	120			
Diphenylamine	3.66	0.000800	4.00	0	91.6	80	120			
Ethyl methanesulfonate	3.61	0.000800	4.00	0	90.3	80	120			
Methyl methanesulfonate	3.76	0.000800	4.00	0	94.0	80	120			
N-Nitrosopiperidine	3.94	0.000800	4.00	0	98.6	80	120			
p-Dimethylaminoazobenzene	3.96	0.000800	4.00	0	99.0	80	120			N
Pentachloronitrobenzene	4.30	0.000800	4.00	0	108	80	120			
Phenacetin	4.30	0.000800	4.00	0	107	80	120			
Pronamide	4.21	0.000800	4.00	0	105	80	120			
Surr: 2,4,6-Tribromophenol	4020		4000		101	80	120			
Surr: 2-Fluorobiphenyl	3610		4000		90.2	80	120			
Surr: 2-Fluorophenol	4070		4000		102	80	120			
Surr: 4-Terphenyl-d14	3660		4000		91.5	80	120			
Surr: Nitrobenzene-d5	3960		4000		99.0	80	120			
Surr: Phenol-d6	3930		4000		98.2	80	120			

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318B

The QC data in batch 50965 applies to the following samples: 1203116-01G, 1203116-02G, 1203116-05G, 1203116-06G, 1203116-07H, 1203116-08G

Sample ID: LCS-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: LCS	Run ID: GCMS9_120318B	Analysis Date: 3/18/2012 10:59:00 AM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2-Diphenylhydrazine	0.00693	0.000800	0.00800	0	86.6	55	115			
1-Methylnaphthalene	0.00648	0.000800	0.00800	0	81.0	45	125			N
2,4,5-Trichlorophenol	0.00777	0.000800	0.00800	0	97.1	50	110			
2,4,6-Trichlorophenol	0.00796	0.000800	0.00800	0	99.5	50	115			
2,4-Dichlorophenol	0.00845	0.000800	0.00800	0	106	50	105			S
2,4-Dimethylphenol	0.00964	0.000800	0.00800	0	120	30	110			S
2,4-Dinitrophenol	0.00772	0.00400	0.00800	0	96.5	15	140			
2,4-Dinitrotoluene	0.00766	0.000800	0.00800	0	95.7	50	120			
2,6-Dichlorophenol	0.00799	0.000800	0.00800	0	99.9	35	120			
2,6-Dinitrotoluene	0.00738	0.000800	0.00800	0	92.2	50	115			
2-Chloronaphthalene	0.00815	0.000800	0.00800	0	102	50	105			
2-Chlorophenol	0.00668	0.000800	0.00800	0	83.6	35	105			
2-Methylnaphthalene	0.00713	0.000800	0.00800	0	89.1	45	105			
2-Methylphenol	0.00622	0.000800	0.00800	0	77.7	40	110			
2-Nitroaniline	0.00728	0.000800	0.00800	0	91.0	50	115			
2-Nitrophenol	0.00763	0.000800	0.00800	0	95.4	40	115			
3,3'-Dichlorobenzidine	0.00763	0.00400	0.00800	0	95.4	20	110			
3-Nitroaniline	0.00720	0.000800	0.00800	0	90.0	20	125			
4,6-Dinitro-2-methylphenol	0.00787	0.00200	0.00800	0	98.4	40	130			
4-Bromophenyl phenyl ether	0.00789	0.000800	0.00800	0	98.7	50	115			
4-Chloro-3-methylphenol	0.00752	0.000800	0.00800	0	94.0	45	110			
4-Chloroaniline	0.00579	0.00200	0.00800	0	72.4	15	110			
4-Chlorophenyl phenyl ether	0.00718	0.000800	0.00800	0	89.8	50	110			
4-Methylphenol	0.00608	0.000800	0.00800	0	76.0	30	110			
4-Nitroaniline	0.00686	0.000800	0.00800	0	85.8	35	120			
4-Nitrophenol	0.00672	0.00400	0.00800	0	84.0	20	120			
Acenaphthene	0.00694	0.000800	0.00800	0	86.7	45	110			
Acenaphthylene	0.00809	0.000800	0.00800	0	101	50	105			
Acetophenone	0.0106	0.000800	0.0160	0	66.6	45	125			
Aniline	0.00268	0.000800	0.00800	0	33.6	10	140			
Anthracene	0.00785	0.000800	0.00800	0	98.1	55	110			
Benzidine	0.00506	0.00600	0.00800	0	63.3	20	125			J
Benzo[a]anthracene	0.00715	0.000800	0.00800	0	89.4	55	110			
Benzo[a]pyrene	0.00877	0.000800	0.00800	0	110	55	110			
Benzo[b]fluoranthene	0.00874	0.000800	0.00800	0	109	45	120			
Benzo[g,h,i]perylene	0.00856	0.000800	0.00800	0	107	40	125			
Benzo[k]fluoranthene	0.00677	0.000800	0.00800	0	84.6	45	125			
Benzoic acid	0.00495	0.00600	0.00800	0	61.9	5	120			
Benzyl alcohol	0.00617	0.00200	0.00800	0	77.2	30	110			
Biphenyl	0.00644	0.000800	0.00800	0	80.6	45	125			

Qualifiers:	B Analyte detected in the associated Method Blank	DF Dilution Factor	
	J Analyte detected between MDL and RL	MDL Method Detection Limit	
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits	
	RL Reporting Limit	S Spike Recovery outside control limits	
	J Analyte detected between SDL and RL	N Parameter not NELAC certified	

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318B

Sample ID: LCS-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: LCS	Run ID: GCMS9_120318B	Analysis Date: 3/18/2012 10:59:00 AM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bis(2-chloroethoxy)methane	0.00710	0.000800	0.00800	0	88.7	45	105			
Bis(2-chloroethyl)ether	0.00508	0.000800	0.00800	0	63.5	35	110			
Bis(2-chloroisopropyl)ether	0.00446	0.000800	0.00800	0	55.7	25	130			
Bis(2-ethylhexyl)phthalate	0.00782	0.00300	0.00800	0	97.7	40	125			
Butyl benzyl phthalate	0.00769	0.00600	0.00800	0	96.2	45	115			
Carbazole	0.00756	0.000800	0.00800	0	94.6	50	115			
Chrysene	0.00693	0.000800	0.00800	0	86.6	55	110			
Di-n-butyl phthalate	0.00817	0.00600	0.00800	0	102	55	115			
Di-n-octyl phthalate	0.00765	0.00600	0.00800	0	95.6	35	135			
Dibenz[a,h]anthracene	0.00875	0.000800	0.00800	0	109	40	125			
Dibenzofuran	0.00698	0.000800	0.00800	0	87.3	55	105			
Diethyl phthalate	0.00750	0.00600	0.00800	0	93.7	40	120			
Dimethyl phthalate	0.00754	0.00600	0.00800	0	94.2	25	125			
Fluoranthene	0.00804	0.000800	0.00800	0	101	55	115			
Fluorene	0.00706	0.000800	0.00800	0	88.2	50	110			
Hexachlorobenzene	0.00809	0.000800	0.00800	0	101	50	110			
Hexachlorobutadiene	0.00686	0.000800	0.00800	0	85.7	25	105			
Hexachlorocyclopentadiene	0.00940	0.00200	0.00800	0	118	25	125			
Hexachloroethane	0.00574	0.000800	0.00800	0	71.8	30	100			
Indeno[1,2,3-cd]pyrene	0.00861	0.000800	0.00800	0	108	45	125			
Isophorone	0.00703	0.000800	0.00800	0	87.8	50	110			
N-Nitrosodi-n-propylamine	0.00576	0.000800	0.00800	0	72.0	35	130			
N-Nitrosodimethylamine	0.00356	0.000800	0.00800	0	44.4	25	110			
N-Nitrosodiphenylamine	0.0153	0.000800	0.0160	0	95.6	50	110			
Naphthalene	0.00680	0.000800	0.00800	0	85.0	40	100			
Nitrobenzene	0.00632	0.000800	0.00800	0	79.0	45	110			
Pentachlorobenzene	0.0137	0.000800	0.0160	0	85.9	35	120			
Pentachlorophenol	0.00874	0.000800	0.00800	0	109	40	115			
Phenanthrene	0.00713	0.000800	0.00800	0	89.1	50	115			
Phenol	0.00347	0.000800	0.00800	0	43.4	20	115			
Pyrene	0.00734	0.000800	0.00800	0	91.8	50	130			
Pyridine	0.00364	0.00200	0.00800	0	45.4	20	110			
Surr: 2,4,6-Tribromophenol	16.4		16.00		102	42	124			
Surr: 2-Fluorobiphenyl	15.1		16.00		94.5	50	110			
Surr: 2-Fluorophenol	11.4		16.00		71.2	20	110			
Surr: 4-Terphenyl-d14	15.7		16.00		98.2	51	135			
Surr: Nitrobenzene-d5	14.1		16.00		88.2	41	110			
Surr: Phenol-d6	7.00		16.00		43.8	20	115			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318B

Sample ID: LCSD-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: LCSD	Run ID: GCMS9_120318B	Analysis Date: 3/18/2012 11:23:00 AM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4,5-Tetrachlorobenzene	0.0138	0.000800	0.0160	0	86.6	35	120	0	30	
1,2-Diphenylhydrazine	0.00691	0.000800	0.00800	0	86.4	55	115	0.289	30	
1-Methylnaphthalene	0.00658	0.000800	0.00800	0	82.2	45	125	1.59	30	N
2,4,5-Trichlorophenol	0.00803	0.000800	0.00800	0	100	50	110	3.34	30	
2,4,6-Trichlorophenol	0.00810	0.000800	0.00800	0	101	50	115	1.74	30	
2,4-Dichlorophenol	0.00861	0.000800	0.00800	0	108	50	105	1.88	30	S
2,4-Dimethylphenol	0.00993	0.000800	0.00800	0	124	30	110	2.94	30	S
2,4-Dinitrophenol	0.00743	0.00400	0.00800	0	92.9	15	140	3.80	30	
2,4-Dinitrotoluene	0.00772	0.000800	0.00800	0	96.5	50	120	0.832	30	
2,6-Dichlorophenol	0.00822	0.000800	0.00800	0	103	35	120	2.81	30	
2,6-Dinitrotoluene	0.00742	0.000800	0.00800	0	92.8	50	115	0.595	30	
2-Chloronaphthalene	0.00815	0.000800	0.00800	0	102	50	105	0.049	30	
2-Chlorophenol	0.00678	0.000800	0.00800	0	84.8	35	105	1.49	30	
2-Methylnaphthalene	0.00728	0.000800	0.00800	0	91.0	45	105	2.16	30	
2-Methylphenol	0.00662	0.000800	0.00800	0	82.7	40	110	6.23	30	
2-Nitroaniline	0.00728	0.000800	0.00800	0	91.0	50	115	0.055	30	
2-Nitrophenol	0.00776	0.000800	0.00800	0	97.0	40	115	1.77	30	
3,3'-Dichlorobenzidine	0.00841	0.00400	0.00800	0	105	20	110	9.68	30	
3-Nitroaniline	0.00728	0.000800	0.00800	0	91.0	20	125	1.05	30	
4,6-Dinitro-2-methylphenol	0.00784	0.00200	0.00800	0	98.0	40	130	0.357	30	
4-Bromophenyl phenyl ether	0.00782	0.000800	0.00800	0	97.8	50	115	0.865	30	
4-Chloro-3-methylphenol	0.00750	0.000800	0.00800	0	93.8	45	110	0.160	30	
4-Chloroaniline	0.00596	0.00200	0.00800	0	74.6	15	110	2.93	30	
4-Chlorophenyl phenyl ether	0.00725	0.000800	0.00800	0	90.6	50	110	0.943	30	
4-Methylphenol	0.00640	0.000800	0.00800	0	80.0	30	110	5.07	30	
4-Nitroaniline	0.00760	0.000800	0.00800	0	95.0	35	120	10.2	30	
4-Nitrophenol	0.00700	0.00400	0.00800	0	87.5	20	120	4.08	30	
Acenaphthene	0.00703	0.000800	0.00800	0	87.8	45	110	1.32	30	
Acenaphthylene	0.00825	0.000800	0.00800	0	103	50	105	1.96	30	
Acetophenone	0.0107	0.000800	0.0160	0	67.1	45	125	0.823	30	
Aniline	0.00246	0.000800	0.00800	0	30.7	10	140	8.87	30	
Anthracene	0.00790	0.000800	0.00800	0	98.7	55	110	0.610	30	
Benzidine	0.00292	0.00600	0.00800	0	36.4	20	125	53.8	30	R
Benzo[a]anthracene	0.00720	0.000800	0.00800	0	90.0	55	110	0.669	30	
Benzo[a]pyrene	0.00879	0.000800	0.00800	0	110	55	110	0.182	30	
Benzo[b]fluoranthene	0.00861	0.000800	0.00800	0	108	45	120	1.52	30	
Benzo[g,h,i]perylene	0.00856	0.000800	0.00800	0	107	40	125	0.046	30	
Benzo[k]fluoranthene	0.00686	0.000800	0.00800	0	85.7	45	125	1.23	30	
Benzoic acid	0.00512	0.00600	0.00800	0	64.0	5	120	3.42	30	
Benzyl alcohol	0.00621	0.00200	0.00800	0	77.7	30	110	0.646	30	
Biphenyl	0.00662	0.000800	0.00800	0	82.7	45	125	2.63	30	

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318B

Sample ID: LCSD-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: LCSD	Run ID: GCMS9_120318B	Analysis Date: 3/18/2012 11:23:00 AM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bis(2-chloroethoxy)methane	0.00716	0.000800	0.00800	0	89.5	45	105	0.898	30	
Bis(2-chloroethyl)ether	0.00504	0.000800	0.00800	0	63.0	35	110	0.791	30	
Bis(2-chloroisopropyl)ether	0.00450	0.000800	0.00800	0	56.3	25	130	1.07	30	
Bis(2-ethylhexyl)phthalate	0.00788	0.00300	0.00800	0	98.5	40	125	0.765	30	
Butyl benzyl phthalate	0.00759	0.00600	0.00800	0	94.9	45	115	1.31	30	
Carbazole	0.00759	0.000800	0.00800	0	94.8	50	115	0.317	30	
Chrysene	0.00678	0.000800	0.00800	0	84.7	55	110	2.22	30	
Di-n-butyl phthalate	0.00850	0.00600	0.00800	0	106	55	115	3.94	30	
Di-n-octyl phthalate	0.00764	0.00600	0.00800	0	95.6	35	135	0.052	30	
Dibenz[a,h]anthracene	0.00875	0.000800	0.00800	0	109	40	125	0.045	30	
Dibenzofuran	0.00700	0.000800	0.00800	0	87.5	55	105	0.229	30	
Diethyl phthalate	0.00763	0.00600	0.00800	0	95.4	40	120	1.80	30	
Dimethyl phthalate	0.00753	0.00600	0.00800	0	94.2	25	125	0.053	30	
Fluoranthene	0.00807	0.000800	0.00800	0	101	55	115	0.348	30	
Fluorene	0.00708	0.000800	0.00800	0	88.6	50	110	0.396	30	
Hexachlorobenzene	0.00800	0.000800	0.00800	0	100	50	110	1.14	30	
Hexachlorobutadiene	0.00695	0.000800	0.00800	0	86.9	25	105	1.33	30	
Hexachlorocyclopentadiene	0.00948	0.00200	0.00800	0	118	25	125	0.805	30	
Hexachloroethane	0.00575	0.000800	0.00800	0	71.9	30	100	0.139	30	
Indeno[1,2,3-cd]pyrene	0.00862	0.000800	0.00800	0	108	45	125	0.139	30	
Isophorone	0.00709	0.000800	0.00800	0	88.6	50	110	0.850	30	
N-Nitrosodi-n-propylamine	0.00575	0.000800	0.00800	0	71.9	35	130	0.069	30	
N-Nitrosodimethylamine	0.00372	0.000800	0.00800	0	46.4	25	110	4.40	30	
N-Nitrosodiphenylamine	0.0157	0.000800	0.0160	0	98.2	50	110	2.68	30	
Naphthalene	0.00691	0.000800	0.00800	0	86.4	40	100	1.63	30	
Nitrobenzene	0.00634	0.000800	0.00800	0	79.2	45	110	0.316	30	
Pentachlorobenzene	0.0135	0.000800	0.0160	0	84.4	35	120	1.85	30	
Pentachlorophenol	0.00861	0.000800	0.00800	0	108	40	115	1.48	30	
Phenanthrene	0.00714	0.000800	0.00800	0	89.2	50	115	0.168	30	
Phenol	0.00362	0.000800	0.00800	0	45.3	20	115	4.17	30	
Pyrene	0.00731	0.000800	0.00800	0	91.4	50	130	0.382	30	
Pyridine	0.00286	0.00200	0.00800	0	35.8	20	110	23.9	30	
Surr: 2,4,6-Tribromophenol	16.2		16.00		101	42	124	0	0	
Surr: 2-Fluorobiphenyl	15.5		16.00		96.8	50	110	0	0	
Surr: 2-Fluorophenol	11.6		16.00		72.5	20	110	0	0	
Surr: 4-Terphenyl-d14	15.5		16.00		97.0	51	135	0	0	
Surr: Nitrobenzene-d5	14.0		16.00		87.8	41	110	0	0	
Surr: Phenol-d6	7.32		16.00		45.8	20	115	0	0	

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318B

Sample ID: MB-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: MBLK	Run ID: GCMS9_120318B	Analysis Date: 3/18/2012 1:17:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4,5-Tetrachlorobenzene	<0.000200	0.000800								
1,2-Diphenylhydrazine	<0.000200	0.000800								
1-Methylnaphthalene	<0.000200	0.000800								N
2,4,5-Trichlorophenol	<0.000200	0.000800								
2,4,6-Trichlorophenol	<0.000200	0.000800								
2,4-Dichlorophenol	<0.000200	0.000800								
2,4-Dimethylphenol	<0.000200	0.000800								
2,4-Dinitrophenol	<0.00100	0.00400								
2,4-Dinitrotoluene	<0.000200	0.000800								
2,6-Dichlorophenol	<0.000200	0.000800								
2,6-Dinitrotoluene	<0.000200	0.000800								
2-Chloronaphthalene	<0.000200	0.000800								
2-Chlorophenol	<0.000200	0.000800								
2-Methylnaphthalene	<0.000200	0.000800								
2-Methylphenol	<0.000200	0.000800								
2-Nitroaniline	<0.000200	0.000800								
2-Nitrophenol	<0.000200	0.000800								
3,3'-Dichlorobenzidine	<0.00100	0.00400								
3-Nitroaniline	<0.000200	0.000800								
4,6-Dinitro-2-methylphenol	<0.000600	0.00200								
4-Bromophenyl phenyl ether	<0.000200	0.000800								
4-Chloro-3-methylphenol	<0.000200	0.000800								
4-Chloroaniline	<0.000600	0.00200								
4-Chlorophenyl phenyl ether	<0.000200	0.000800								
4-Methylphenol	<0.000200	0.000800								
4-Nitroaniline	<0.000200	0.000800								
4-Nitrophenol	<0.00100	0.00400								
Acenaphthene	<0.000200	0.000800								
Acenaphthylene	<0.000200	0.000800								
Acetophenone	<0.000200	0.000800								
Aniline	<0.000200	0.000800								
Anthracene	<0.000200	0.000800								
Benzidine	<0.00200	0.00600								
Benzo[a]anthracene	<0.000200	0.000800								
Benzo[a]pyrene	<0.000200	0.000800								
Benzo[b]fluoranthene	<0.000200	0.000800								
Benzo[g,h,i]perylene	<0.000200	0.000800								
Benzo[k]fluoranthene	<0.000200	0.000800								
Benzoic acid	<0.00200	0.00600								
Benzyl alcohol	<0.000600	0.00200								
Biphenyl	<0.000200	0.000800								

Qualifiers:	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318B

Sample ID: MB-50965	Batch ID: 50965	TestNo: SW8270C	Units: mg/L
SampType: MBLK	Run ID: GCMS9_120318B	Analysis Date: 3/18/2012 1:17:00 PM	Prep Date: 3/15/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bis(2-chloroethoxy)methane	<0.000200	0.000800								
Bis(2-chloroethyl)ether	<0.000200	0.000800								
Bis(2-chloroisopropyl)ether	<0.000200	0.000800								
Bis(2-ethylhexyl)phthalate	<0.00100	0.00300								
Butyl benzyl phthalate	<0.00200	0.00600								
Carbazole	<0.000200	0.000800								
Chrysene	<0.000200	0.000800								
Di-n-butyl phthalate	<0.00200	0.00600								
Di-n-octyl phthalate	<0.00200	0.00600								
Dibenz[a,h]anthracene	<0.000200	0.000800								
Dibenzofuran	<0.000200	0.000800								
Diethyl phthalate	<0.00200	0.00600								
Dimethyl phthalate	<0.00200	0.00600								
Fluoranthene	<0.000200	0.000800								
Fluorene	<0.000200	0.000800								
Hexachlorobenzene	<0.000200	0.000800								
Hexachlorobutadiene	<0.000200	0.000800								
Hexachlorocyclopentadiene	<0.000600	0.00200								
Hexachloroethane	<0.000200	0.000800								
Indeno[1,2,3-cd]pyrene	<0.000200	0.000800								
Isophorone	<0.000200	0.000800								
N-Nitrosodi-n-propylamine	<0.000100	0.000800								
N-Nitrosodimethylamine	<0.000200	0.000800								
N-Nitrosodiphenylamine	<0.000200	0.000800								
Naphthalene	<0.000200	0.000800								
Nitrobenzene	<0.000200	0.000800								
Pentachlorobenzene	<0.000200	0.000800								
Pentachlorophenol	<0.000200	0.000800								
Phenanthrene	<0.000200	0.000800								
Phenol	<0.000200	0.000800								
Pyrene	<0.000200	0.000800								
Pyridine	<0.000800	0.00200								
Surr: 2,4,6-Tribromophenol	15.0		16.00		93.5	42	124			
Surr: 2-Fluorobiphenyl	13.7		16.00		85.5	50	110			
Surr: 2-Fluorophenol	8.52		16.00		53.2	20	110			
Surr: 4-Terphenyl-d14	13.9		16.00		87.0	51	135			
Surr: Nitrobenzene-d5	12.4		16.00		77.8	41	110			
Surr: Phenol-d6	5.16		16.00		32.2	20	115			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318B

Sample ID: ICV-120318	Batch ID: R59691	TestNo: SW8270C	Units: mg/L
SampType: ICV	Run ID: GCMS9_120318B	Analysis Date: 3/18/2012 10:11:00 AM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4,5-Tetrachlorobenzene	4.38	0.000800	4.00	0	109	80	120			
1,2-Diphenylhydrazine	3.59	0.000800	4.00	0	89.8	80	120			
1-Methylnaphthalene	7.24	0.000800	8.00	0	90.5	80	120			N
2,4,5-Trichlorophenol	4.64	0.000800	4.00	0	116	80	120			
2,4,6-Trichlorophenol	4.69	0.000800	4.00	0	117	80	120			
2,4-Dichlorophenol	4.77	0.000800	4.00	0	119	80	120			
2,4-Dimethylphenol	3.90	0.000800	4.00	0	97.4	80	120			
2,4-Dinitrophenol	4.44	0.00400	4.00	0	111	80	120			
2,4-Dinitrotoluene	4.42	0.000800	4.00	0	110	80	120			
2,6-Dichlorophenol	4.38	0.000800	4.00	0	109	80	120			
2,6-Dinitrotoluene	3.95	0.000800	4.00	0	98.7	80	120			
2-Chloronaphthalene	3.92	0.000800	4.00	0	98.1	80	120			
2-Chlorophenol	4.16	0.000800	4.00	0	104	80	120			
2-Methylnaphthalene	4.02	0.000800	4.00	0	101	80	120			
2-Methylphenol	3.84	0.000800	4.00	0	96.0	80	120			
2-Nitroaniline	4.23	0.000800	4.00	0	106	80	120			
2-Nitrophenol	4.55	0.000800	4.00	0	114	80	120			
3,3'-Dichlorobenzidine	4.55	0.00400	4.00	0	114	80	120			
3-Nitroaniline	4.28	0.000800	4.00	0	107	80	120			
4,6-Dinitro-2-methylphenol	4.41	0.00200	4.00	0	110	80	120			
4-Bromophenyl phenyl ether	4.48	0.000800	4.00	0	112	80	120			
4-Chloro-3-methylphenol	4.27	0.000800	4.00	0	107	80	120			
4-Chloroaniline	3.91	0.00200	4.00	0	97.6	80	120			
4-Chlorophenyl phenyl ether	3.86	0.000800	4.00	0	96.5	80	120			
4-Methylphenol	3.92	0.000800	4.00	0	98.0	80	120			
4-Nitroaniline	4.79	0.000800	4.00	0	120	80	120			
4-Nitrophenol	4.29	0.00400	4.00	0	107	80	120			
Acenaphthene	3.89	0.000800	4.00	0	97.2	80	120			
Acenaphthylene	3.88	0.000800	4.00	0	96.9	80	120			
Acetophenone	3.87	0.000800	4.00	0	96.8	80	120			
Aniline	3.34	0.000800	4.00	0	83.6	80	120			
Anthracene	3.94	0.000800	4.00	0	98.6	80	120			
Benzidine	4.71	0.00600	4.00	0	118	80	120			
Benzo[a]anthracene	3.81	0.000800	4.00	0	95.3	80	120			
Benzo[a]pyrene	4.02	0.000800	4.00	0	101	80	120			
Benzo[b]fluoranthene	4.34	0.000800	4.00	0	108	80	120			
Benzo[g,h,i]perylene	4.34	0.000800	4.00	0	109	80	120			
Benzo[k]fluoranthene	3.50	0.000800	4.00	0	87.4	80	120			
Benzoic acid	4.73	0.00600	4.00	0	118	80	120			
Benzyl alcohol	4.42	0.00200	4.00	0	110	80	120			
Biphenyl	3.59	0.000800	4.00	0	89.8	80	120			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS9_120318B

Sample ID: ICV-120318	Batch ID: R59691	TestNo: SW8270C	Units: mg/L
SampType: ICV	Run ID: GCMS9_120318B	Analysis Date: 3/18/2012 10:11:00 AM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Bis(2-chloroethoxy)methane	3.85	0.000800	4.00	0	96.4	80	120			
Bis(2-chloroethyl)ether	3.49	0.000800	4.00	0	87.2	80	120			
Bis(2-chloroisopropyl)ether	2.97	0.000800	4.00	0	74.2	80	120			
Bis(2-ethylhexyl)phthalate	3.94	0.00300	4.00	0	98.5	80	120			S
Butyl benzyl phthalate	3.97	0.00600	4.00	0	99.2	80	120			
Carbazole	4.01	0.000800	4.00	0	100	80	120			
Chrysene	3.79	0.000800	4.00	0	94.8	80	120			
Di-n-butyl phthalate	4.07	0.00600	4.00	0	102	80	120			
Di-n-octyl phthalate	3.81	0.00600	4.00	0	95.2	80	120			
Dibenz[a,h]anthracene	4.24	0.000800	4.00	0	106	80	120			
Dibenzofuran	3.88	0.000800	4.00	0	96.9	80	120			
Diethyl phthalate	4.24	0.00600	4.00	0	106	80	120			
Dimethyl phthalate	4.23	0.00600	4.00	0	106	80	120			
Fluoranthene	4.16	0.000800	4.00	0	104	80	120			
Fluorene	3.70	0.000800	4.00	0	92.6	80	120			
Hexachlorobenzene	4.51	0.000800	4.00	0	113	80	120			
Hexachlorobutadiene	4.49	0.000800	4.00	0	112	80	120			
Hexachlorocyclopentadiene	4.16	0.00200	4.00	0	104	80	120			
Hexachloroethane	3.86	0.000800	4.00	0	96.6	80	120			
Indeno[1,2,3-cd]pyrene	4.21	0.000800	4.00	0	105	80	120			
Isophorone	3.88	0.000800	4.00	0	97.0	80	120			
N-Nitrosodi-n-propylamine	3.41	0.000800	4.00	0	85.4	80	120			
N-Nitrosodimethylamine	3.55	0.000800	4.00	0	88.8	80	120			
N-Nitrosodiphenylamine	3.93	0.000800	4.00	0	98.3	80	120			
Naphthalene	3.85	0.000800	4.00	0	96.3	80	120			
Nitrobenzene	3.68	0.000800	4.00	0	92.0	80	120			
Pentachlorobenzene	4.16	0.000800	4.00	0	104	80	120			
Pentachlorophenol	4.62	0.000800	4.00	0	116	80	120			
Phenanthrene	3.75	0.000800	4.00	0	93.8	80	120			
Phenol	3.78	0.000800	4.00	0	94.4	80	120			
Pyrene	3.93	0.000800	4.00	0	98.2	80	120			
Pyridine	3.75	0.00200	4.00	0	93.7	80	120			
Surr: 2,4,6-Tribromophenol	3990		4000		99.8	80	120			
Surr: 2-Fluorobiphenyl	4050		4000		101	80	120			
Surr: 2-Fluorophenol	4120		4000		103	80	120			
Surr: 4-Terphenyl-d14	4080		4000		102	80	120			
Surr: Nitrobenzene-d5	3790		4000		94.8	80	120			
Surr: Phenol-d6	3870		4000		96.8	80	120			

Qualifiers:	B Analyte detected in the associated Method Blank	DF Dilution Factor	
	J Analyte detected between MDL and RL	MDL Method Detection Limit	
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits	
	RL Reporting Limit	S Spike Recovery outside control limits	
	J Analyte detected between SDL and RL	N Parameter not NELAC certified	

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

The QC data in batch 51020 applies to the following samples: 1203116-01A, 1203116-02A, 1203116-03A, 1203116-04A, 1203116-05A, 1203116-06A, 1203116-07A, 1203116-08A, 1203116-09A

Sample ID: LCS-51020	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: LCS	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 9:52:00 AM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	0.0225	0.00100	0.0232	0	97.1	80	130			
1,1,1-Trichloroethane	0.0225	0.00100	0.0232	0	97.1	65	130			
1,1,2,2-Tetrachloroethane	0.0253	0.00100	0.0232	0	109	65	130			
1,1,2-Trichloroethane	0.0212	0.00100	0.0232	0	91.4	75	125			
1,1-Dichloroethane	0.0222	0.00100	0.0232	0	95.6	70	135			
1,1-Dichloroethene	0.0231	0.00100	0.0232	0	99.7	70	130			
1,1-Dichloropropene	0.0231	0.00100	0.0232	0	99.6	75	130			
1,2,3-Trichlorobenzene	0.0244	0.00500	0.0232	0	105	55	140			
1,2,3-Trichloropropane	0.0252	0.00100	0.0232	0	109	75	125			
1,2,4-Trichlorobenzene	0.0237	0.00500	0.0232	0	102	65	135			
1,2,4-Trimethylbenzene	0.0235	0.00500	0.0232	0	101	75	130			
1,2-Dibromo-3-chloropropane	0.0238	0.0100	0.0232	0	103	50	130			
1,2-Dibromoethane	0.0228	0.00100	0.0232	0	98.4	80	120			
1,2-Dichlorobenzene	0.0222	0.00100	0.0232	0	95.8	70	120			
1,2-Dichloroethane	0.0222	0.00100	0.0232	0	95.5	70	130			
1,2-Dichloropropane	0.0205	0.00100	0.0232	0	88.4	75	125			
1,3,5-Trimethylbenzene	0.0230	0.00500	0.0232	0	99.4	75	130			
1,3-Dichlorobenzene	0.0226	0.00100	0.0232	0	97.2	75	125			
1,3-Dichloropropane	0.0230	0.00100	0.0232	0	99.0	75	125			
1,4-Dichloro-2-butene	0.0233	0.00200	0.0232	0	100	50	150			
1,4-Dichlorobenzene	0.0221	0.00100	0.0232	0	95.3	75	125			
2,2-Dichloropropane	0.0239	0.00100	0.0232	0	103	70	135			
2-Butanone	0.0281	0.0150	0.0232	0	121	30	150			
2-Chloroethylvinylether	0.0224	0.0150	0.0232	0	96.6	50	150			
2-Chlorotoluene	0.0227	0.00100	0.0232	0	97.8	75	125			
2-Hexanone	0.0265	0.0150	0.0232	0	114	55	130			
4-Chlorotoluene	0.0232	0.00100	0.0232	0	100	75	130			
4-Methyl-2-pentanone	0.0262	0.0150	0.0232	0	113	60	135			
Acetone	0.0316	0.0150	0.0232	0	136	40	140			
Acrylonitrile	0.0455	0.00300	0.0464	0	98.1	50	150			
Benzene	0.0220	0.00100	0.0232	0	94.6	80	120			
Bromobenzene	0.0220	0.00100	0.0232	0	94.7	75	125			
Bromochloromethane	0.0206	0.00100	0.0232	0	88.6	65	130			
Bromodichloromethane	0.0199	0.00100	0.0232	0	85.6	75	120			
Bromoform	0.0215	0.00100	0.0232	0	92.5	70	130			
Bromomethane	0.0232	0.00100	0.0232	0	100	30	145			
Carbon disulfide	0.0205	0.0150	0.0232	0	88.5	35	160			
Carbon tetrachloride	0.0224	0.00100	0.0232	0	96.3	65	140			
Chlorobenzene	0.0218	0.00100	0.0232	0	94.1	80	120			

Qualifiers:	B Analyte detected in the associated Method Blank J Analyte detected between MDL and RL ND Not Detected at the Method Detection Limit RL Reporting Limit J Analyte detected between SDL and RL	DF Dilution Factor MDL Method Detection Limit R RPD outside accepted control limits S Spike Recovery outside control limits N Parameter not NELAC certified
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: LCS-51020	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: LCS	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 9:52:00 AM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloroethane	0.0216	0.00100	0.0232	0	93.1	60	135			
Chloroform	0.0210	0.00100	0.0232	0	90.3	65	135			
Chloromethane	0.0213	0.00100	0.0232	0	91.9	40	125			
cis-1,2-Dichloroethene	0.0211	0.00100	0.0232	0	91.1	70	125			
cis-1,3-Dichloropropene	0.0206	0.00100	0.0232	0	88.8	70	130			
Dibromochloromethane	0.0217	0.00100	0.0232	0	93.6	60	135			
Dibromomethane	0.0199	0.00100	0.0232	0	85.6	75	125			
Dichlorodifluoromethane	0.0171	0.00100	0.0232	0	73.8	30	155			
Ethylbenzene	0.0218	0.00100	0.0232	0	94.1	75	125			
Iodomethane	0.0182	0.0150	0.0232	0	78.4	50	150			
Isopropylbenzene	0.0223	0.00100	0.0232	0	95.9	75	125			
m,p-Xylene	0.0445	0.00200	0.0464	0	96.0	75	130			
Methyl tert-butyl ether	0.0251	0.00100	0.0232	0	108	65	125			
Methylene chloride	0.0254	0.00250	0.0232	0	109	55	140			
n-Butylbenzene	0.0251	0.00100	0.0232	0	108	70	135			
n-Propylbenzene	0.0233	0.00100	0.0232	0	100	70	130			
o-Xylene	0.0220	0.00100	0.0232	0	94.7	80	120			
p-Isopropyltoluene	0.0232	0.00100	0.0232	0	100	75	130			
sec-Butylbenzene	0.0233	0.00100	0.0232	0	101	70	125			
Styrene	0.0207	0.00100	0.0232	0	89.1	65	135			
tert-Butylbenzene	0.0226	0.00100	0.0232	0	97.2	70	130			
Tetrachloroethene	0.0210	0.00200	0.0232	0	90.4	45	150			
Toluene	0.0200	0.00200	0.0232	0	86.1	75	120			
trans-1,2-Dichloroethene	0.0214	0.00100	0.0232	0	92.2	60	140			
trans-1,3-Dichloropropene	0.0204	0.00100	0.0232	0	87.8	55	140			
Trichloroethene	0.0192	0.00200	0.0232	0	82.9	70	125			
Trichlorofluoromethane	0.0208	0.00100	0.0232	0	89.4	60	145			
Vinyl chloride	0.0222	0.00100	0.0232	0	95.6	50	145			
Surr: 1,2-Dichloroethane-d4	206		200.0		103	70	120			
Surr: 4-Bromofluorobenzene	212		200.0		106	75	120			
Surr: Dibromofluoromethane	194		200.0		96.8	85	115			
Surr: Toluene-d8	200		200.0		100	85	120			

Sample ID: MB-51020	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MBLK	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 10:17:00 AM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	<0.000200	0.00100								
1,1,1-Trichloroethane	<0.000200	0.00100								
1,1,2,2-Tetrachloroethane	<0.000200	0.00100								
1,1,2-Trichloroethane	<0.000200	0.00100								

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: MB-51020	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MBLK	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 10:17:00 AM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1-Dichloroethane	<0.000200	0.00100								
1,1-Dichloroethene	<0.000200	0.00100								
1,1-Dichloropropene	<0.000200	0.00100								
1,2,3-Trichlorobenzene	<0.00150	0.00500								
1,2,3-Trichloropropane	<0.000300	0.00100								
1,2,4-Trichlorobenzene	<0.00150	0.00500								
1,2,4-Trimethylbenzene	<0.00150	0.00500								
1,2-Dibromo-3-chloropropane	<0.00300	0.0100								
1,2-Dibromoethane	<0.000200	0.00100								
1,2-Dichlorobenzene	<0.000300	0.00100								
1,2-Dichloroethane	<0.000300	0.00100								
1,2-Dichloropropane	<0.000200	0.00100								
1,3,5-Trimethylbenzene	<0.00150	0.00500								
1,3-Dichlorobenzene	<0.000300	0.00100								
1,3-Dichloropropane	<0.000200	0.00100								
1,4-Dichloro-2-butene	<0.00200	0.00200								
1,4-Dichlorobenzene	<0.000300	0.00100								
2,2-Dichloropropane	<0.000200	0.00100								
2-Butanone	<0.00500	0.0150								
2-Chloroethylvinylether	<0.00500	0.0150								
2-Chlorotoluene	<0.000300	0.00100								
2-Hexanone	<0.00500	0.0150								
4-Chlorotoluene	<0.000300	0.00100								
4-Methyl-2-pentanone	<0.00500	0.0150								
Acetone	<0.00500	0.0150								
Acrylonitrile	<0.00100	0.00300								
Benzene	<0.000200	0.00100								
Bromobenzene	<0.000200	0.00100								
Bromochloromethane	<0.000200	0.00100								
Bromodichloromethane	<0.000200	0.00100								
Bromoform	<0.000200	0.00100								
Bromomethane	<0.000300	0.00100								
Carbon disulfide	<0.00500	0.0150								
Carbon tetrachloride	<0.000200	0.00100								
Chlorobenzene	<0.000200	0.00100								
Chloroethane	<0.000300	0.00100								
Chloroform	<0.000300	0.00100								
Chloromethane	<0.000300	0.00100								
cis-1,2-Dichloroethene	<0.000200	0.00100								
cis-1,3-Dichloropropene	<0.000200	0.00100								
Dibromochloromethane	<0.000200	0.00100								

Qualifiers:
 B Analyte detected in the associated Method Blank
 J Analyte detected between MDL and RL
 ND Not Detected at the Method Detection Limit
 RL Reporting Limit
 J Analyte detected between SDL and RL

DF Dilution Factor
 MDL Method Detection Limit
 R RPD outside accepted control limits
 S Spike Recovery outside control limits
 N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: MB-51020	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MBLK	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 10:17:00 AM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Dibromomethane	<0.000200	0.00100								
Dichlorodifluoromethane	<0.000200	0.00100								
Ethylbenzene	<0.000300	0.00100								
Iodomethane	<0.00500	0.0150								
Isopropylbenzene	<0.000200	0.00100								
m,p-Xylene	<0.000600	0.00200								
Methyl tert-butyl ether	<0.000300	0.00100								
Methylene chloride	<0.00250	0.00250								
n-Butylbenzene	<0.000300	0.00100								
n-Propylbenzene	<0.000300	0.00100								
o-Xylene	<0.000300	0.00100								
p-Isopropyltoluene	<0.000300	0.00100								
sec-Butylbenzene	<0.000300	0.00100								
Styrene	<0.000200	0.00100								
tert-Butylbenzene	<0.000300	0.00100								
Tetrachloroethene	<0.000600	0.00200								
Toluene	<0.000600	0.00200								
trans-1,2-Dichloroethene	<0.000200	0.00100								
trans-1,3-Dichloropropene	<0.000200	0.00100								
Trichloroethene	<0.000600	0.00200								
Trichlorofluoromethane	<0.000200	0.00100								
Vinyl chloride	<0.000100	0.00100								
Surr: 1,2-Dichloroethane-d4	209		200.0		104	70	120			
Surr: 4-Bromofluorobenzene	209		200.0		104	75	120			
Surr: Dibromofluoromethane	195		200.0		97.6	85	115			
Surr: Toluene-d8	217		200.0		109	85	120			

Sample ID: 1203126-05AMS	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MS	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 12:44:00 PM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	0.0206	0.00100	0.0232	0	88.8	80	130			
1,1,1-Trichloroethane	0.0216	0.00100	0.0232	0	93.0	65	130			
1,1,2,2-Tetrachloroethane	0.0263	0.00100	0.0232	0	113	65	130			
1,1,2-Trichloroethane	0.0218	0.00100	0.0232	0	93.9	75	125			
1,1-Dichloroethane	0.0220	0.00100	0.0232	0	94.8	70	135			
1,1-Dichloroethene	0.0232	0.00100	0.0232	0	100	70	130			
1,1-Dichloropropene	0.0214	0.00100	0.0232	0	92.1	75	130			
1,2,3-Trichlorobenzene	0.0227	0.00500	0.0232	0	97.7	55	140			
1,2,3-Trichloropropane	0.0258	0.00100	0.0232	0	111	75	125			
1,2,4-Trichlorobenzene	0.0224	0.00500	0.0232	0	96.4	65	135			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: 1203126-05AMS	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MS	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 12:44:00 PM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	0.0235	0.00500	0.0232	0	101	75	130			
1,2-Dibromo-3-chloropropane	0.0221	0.0100	0.0232	0	95.3	50	130			
1,2-Dibromoethane	0.0213	0.00100	0.0232	0	91.7	80	120			
1,2-Dichlorobenzene	0.0220	0.00100	0.0232	0	94.9	70	120			
1,2-Dichloroethane	0.0224	0.00100	0.0232	0	96.6	70	130			
1,2-Dichloropropane	0.0218	0.00100	0.0232	0	94.1	75	125			
1,3,5-Trimethylbenzene	0.0244	0.00500	0.0232	0	105	75	130			
1,3-Dichlorobenzene	0.0218	0.00100	0.0232	0	93.8	75	125			
1,3-Dichloropropane	0.0217	0.00100	0.0232	0	93.7	75	125			
1,4-Dichloro-2-butene	0.0231	0.00200	0.0232	0	99.7	50	150			
1,4-Dichlorobenzene	0.0222	0.00100	0.0232	0	95.5	75	125			
2,2-Dichloropropane	0.0220	0.00100	0.0232	0	94.7	70	135			
2-Butanone	0.0223	0.0150	0.0232	0	96.2	30	150			
2-Chloroethylvinylether	<0.00500	0.0150	0.0232	0	0	50	150			S
2-Chlorotoluene	0.0248	0.00100	0.0232	0	107	75	125			
2-Hexanone	0.0248	0.0150	0.0232	0	107	55	130			
4-Chlorotoluene	0.0245	0.00100	0.0232	0	106	75	130			
4-Methyl-2-pentanone	0.0248	0.0150	0.0232	0	107	60	135			
Acetone	0.0257	0.0150	0.0232	0	111	40	140			
Acrylonitrile	0.0426	0.00300	0.0464	0	91.9	50	150			
Benzene	0.0218	0.00100	0.0232	0	93.8	80	120			
Bromobenzene	0.0234	0.00100	0.0232	0	101	75	125			
Bromochloromethane	0.0216	0.00100	0.0232	0	93.3	65	130			
Bromodichloromethane	0.0211	0.00100	0.0232	0	91.0	75	120			
Bromoform	0.0192	0.00100	0.0232	0	83.0	70	130			
Bromomethane	0.0232	0.00100	0.0232	0	100	30	145			
Carbon disulfide	0.0199	0.0150	0.0232	0	85.8	35	160			
Carbon tetrachloride	0.0212	0.00100	0.0232	0	91.2	65	140			
Chlorobenzene	0.0216	0.00100	0.0232	0	93.2	80	120			
Chloroethane	0.0230	0.00100	0.0232	0	99.2	60	135			
Chloroform	0.0232	0.00100	0.0232	0.00125	94.7	65	135			
Chloromethane	0.0210	0.00100	0.0232	0	90.5	40	125			
cis-1,2-Dichloroethene	0.0214	0.00100	0.0232	0	92.3	70	125			
cis-1,3-Dichloropropene	0.0207	0.00100	0.0232	0	89.3	70	130			
Dibromochloromethane	0.0197	0.00100	0.0232	0	84.9	60	135			
Dibromomethane	0.0222	0.00100	0.0232	0	95.9	75	125			
Dichlorodifluoromethane	0.0166	0.00100	0.0232	0	71.6	30	155			
Ethylbenzene	0.0215	0.00100	0.0232	0	92.5	75	125			
Iodomethane	0.0188	0.0150	0.0232	0	80.9	50	150			
Isopropylbenzene	0.0216	0.00100	0.0232	0	93.3	75	125			
m,p-Xylene	0.0437	0.00200	0.0464	0	94.2	75	130			

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: 1203126-05AMS	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MS	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 12:44:00 PM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Methyl tert-butyl ether	0.0222	0.00100	0.0232	0	95.5	65	125			
Methylene chloride	0.0260	0.00250	0.0232	0	112	55	140			
n-Butylbenzene	0.0246	0.00100	0.0232	0	106	70	135			
n-Propylbenzene	0.0252	0.00100	0.0232	0	109	70	130			
o-Xylene	0.0214	0.00100	0.0232	0	92.2	80	120			
p-Isopropyltoluene	0.0226	0.00100	0.0232	0	97.6	75	130			
sec-Butylbenzene	0.0227	0.00100	0.0232	0	98.0	70	125			
Styrene	0.0175	0.00100	0.0232	0	75.6	65	135			
tert-Butylbenzene	0.0230	0.00100	0.0232	0	99.1	70	130			
Tetrachloroethene	0.0199	0.00200	0.0232	0	85.7	45	150			
Toluene	0.0214	0.00200	0.0232	0	92.1	75	120			
trans-1,2-Dichloroethene	0.0220	0.00100	0.0232	0	94.7	60	140			
trans-1,3-Dichloropropene	0.0208	0.00100	0.0232	0	89.4	55	140			
Trichloroethene	0.0199	0.00200	0.0232	0	85.6	70	125			
Trichlorofluoromethane	0.0225	0.00100	0.0232	0	97.1	60	145			
Vinyl chloride	0.0216	0.00100	0.0232	0	92.9	50	145			
Surr: 1,2-Dichloroethane-d4	210		200.0		105	70	120			
Surr: 4-Bromofluorobenzene	234		200.0		117	75	120			
Surr: Dibromofluoromethane	200		200.0		100	85	115			
Surr: Toluene-d8	200		200.0		100	85	120			

Sample ID: 1203126-05AMSD	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MSD	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 1:08:00 PM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	0.0212	0.00100	0.0232	0	91.4	80	130	2.82	30	
1,1,1-Trichloroethane	0.0221	0.00100	0.0232	0	95.3	65	130	2.43	30	
1,1,2,2-Tetrachloroethane	0.0238	0.00100	0.0232	0	102	65	130	9.99	30	
1,1,2-Trichloroethane	0.0220	0.00100	0.0232	0	95.0	75	125	1.23	30	
1,1-Dichloroethane	0.0253	0.00100	0.0232	0	109	70	135	14.0	30	
1,1-Dichloroethene	0.0258	0.00100	0.0232	0	111	70	130	10.6	30	
1,1-Dichloropropene	0.0221	0.00100	0.0232	0	95.1	75	130	3.18	30	
1,2,3-Trichlorobenzene	0.0239	0.00500	0.0232	0	103	55	140	5.20	30	
1,2,3-Trichloropropane	0.0232	0.00100	0.0232	0	99.8	75	125	10.9	30	
1,2,4-Trichlorobenzene	0.0235	0.00500	0.0232	0	101	65	135	4.93	30	
1,2,4-Trimethylbenzene	0.0234	0.00500	0.0232	0	101	75	130	0.640	30	
1,2-Dibromo-3-chloropropane	0.0214	0.0100	0.0232	0	92.4	50	130	3.08	30	
1,2-Dibromoethane	0.0214	0.00100	0.0232	0	92.2	80	120	0.516	30	
1,2-Dichlorobenzene	0.0221	0.00100	0.0232	0	95.3	70	120	0.408	30	
1,2-Dichloroethane	0.0225	0.00100	0.0232	0	97.0	70	130	0.445	30	
1,2-Dichloropropane	0.0224	0.00100	0.0232	0	96.6	75	125	2.67	30	

Qualifiers: B Analyte detected in the associated Method Blank DF Dilution Factor
J Analyte detected between MDL and RL MDL Method Detection Limit
ND Not Detected at the Method Detection Limit R RPD outside accepted control limits
RL Reporting Limit S Spike Recovery outside control limits
J Analyte detected between SDL and RL N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: 1203126-05AMSD	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MSD	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 1:08:00 PM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	0.0229	0.00500	0.0232	0	98.6	75	130	6.64	30	
1,3-Dichlorobenzene	0.0223	0.00100	0.0232	0	95.9	75	125	2.32	30	
1,3-Dichloropropane	0.0221	0.00100	0.0232	0	95.4	75	125	1.82	30	
1,4-Dichloro-2-butene	0.0207	0.00200	0.0232	0	89.3	50	150	10.9	30	
1,4-Dichlorobenzene	0.0224	0.00100	0.0232	0	96.7	75	125	1.26	30	
2,2-Dichloropropane	0.0237	0.00100	0.0232	0	102	70	135	7.49	30	
2-Butanone	0.0216	0.0150	0.0232	0	93.2	30	150	3.14	30	
2-Chloroethylvinylether	<0.00500	0.0150	0.0232	0	0	50	150	0	30	S
2-Chlorotoluene	0.0230	0.00100	0.0232	0	99.3	75	125	7.20	30	
2-Hexanone	0.0237	0.0150	0.0232	0	102	55	130	4.61	30	
4-Chlorotoluene	0.0228	0.00100	0.0232	0	98.3	75	130	7.11	30	
4-Methyl-2-pentanone	0.0240	0.0150	0.0232	0	103	60	135	3.49	30	
Acetone	0.0277	0.0150	0.0232	0	119	40	140	7.45	30	
Acrylonitrile	0.0460	0.00300	0.0464	0	99.2	50	150	7.60	30	
Benzene	0.0223	0.00100	0.0232	0	96.1	80	120	2.36	30	
Bromobenzene	0.0218	0.00100	0.0232	0	94.2	75	125	6.98	30	
Bromochloromethane	0.0237	0.00100	0.0232	0	102	65	130	8.83	30	
Bromodichloromethane	0.0213	0.00100	0.0232	0	91.9	75	120	0.943	30	
Bromoform	0.0195	0.00100	0.0232	0	84.1	70	130	1.29	30	
Bromomethane	0.0257	0.00100	0.0232	0	111	30	145	10.2	30	
Carbon disulfide	0.0224	0.0150	0.0232	0	96.4	35	160	11.7	30	
Carbon tetrachloride	0.0221	0.00100	0.0232	0	95.2	65	140	4.30	30	
Chlorobenzene	0.0220	0.00100	0.0232	0	94.7	80	120	1.65	30	
Chloroethane	0.0255	0.00100	0.0232	0	110	60	135	10.2	30	
Chloroform	0.0247	0.00100	0.0232	0.00125	101	65	135	6.34	30	
Chloromethane	0.0220	0.00100	0.0232	0	94.9	40	125	4.70	30	
cis-1,2-Dichloroethene	0.0241	0.00100	0.0232	0	104	70	125	11.8	30	
cis-1,3-Dichloropropene	0.0210	0.00100	0.0232	0	90.3	70	130	1.15	30	
Dibromochloromethane	0.0203	0.00100	0.0232	0	87.6	60	135	3.10	30	
Dibromomethane	0.0221	0.00100	0.0232	0	95.2	75	125	0.677	30	
Dichlorodifluoromethane	0.0182	0.00100	0.0232	0	78.5	30	155	9.25	30	
Ethylbenzene	0.0221	0.00100	0.0232	0	95.1	75	125	2.71	30	
Iodomethane	0.0219	0.0150	0.0232	0	94.6	50	150	15.6	30	
Isopropylbenzene	0.0231	0.00100	0.0232	0	99.4	75	125	6.31	30	
m,p-Xylene	0.0451	0.00200	0.0464	0	97.2	75	130	3.13	30	
Methyl tert-butyl ether	0.0238	0.00100	0.0232	0	102	65	125	7.06	30	
Methylene chloride	0.0288	0.00250	0.0232	0	124	55	140	10.3	30	
n-Butylbenzene	0.0249	0.00100	0.0232	0	107	70	135	1.29	30	
n-Propylbenzene	0.0234	0.00100	0.0232	0	101	70	130	7.45	30	
o-Xylene	0.0223	0.00100	0.0232	0	96.2	80	120	4.21	30	
p-Isopropyltoluene	0.0229	0.00100	0.0232	0	98.7	75	130	1.14	30	

Qualifiers:	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: 1203126-05AMSD	Batch ID: 51020	TestNo: SW8260C	Units: mg/L
SampType: MSD	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 1:08:00 PM	Prep Date: 3/19/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
sec-Butylbenzene	0.0234	0.00100	0.0232	0	101	70	125	2.99	30	
Styrene	0.0179	0.00100	0.0232	0	77.2	65	135	2.14	30	
tert-Butylbenzene	0.0228	0.00100	0.0232	0	98.3	70	130	0.786	30	
Tetrachloroethene	0.0207	0.00200	0.0232	0	89.4	45	150	4.19	30	
Toluene	0.0218	0.00200	0.0232	0	93.9	75	120	1.90	30	
trans-1,2-Dichloroethene	0.0243	0.00100	0.0232	0	105	60	140	9.86	30	
trans-1,3-Dichloropropene	0.0210	0.00100	0.0232	0	90.4	55	140	1.05	30	
Trichloroethene	0.0208	0.00200	0.0232	0	89.7	70	125	4.67	30	
Trichlorofluoromethane	0.0245	0.00100	0.0232	0	106	60	145	8.34	30	
Vinyl chloride	0.0225	0.00100	0.0232	0	97.1	50	145	4.40	30	
Surr: 1,2-Dichloroethane-d4	206		200.0		103	70	120	0	0	
Surr: 4-Bromofluorobenzene	212		200.0		106	75	120	0	0	
Surr: Dibromofluoromethane	201		200.0		101	85	115	0	0	
Surr: Toluene-d8	198		200.0		98.9	85	120	0	0	

Qualifiers:

B	Analyte detected in the associated Method Blank	DF	Dilution Factor
J	Analyte detected between MDL and RL	MDL	Method Detection Limit
ND	Not Detected at the Method Detection Limit	R	RPD outside accepted control limits
RL	Reporting Limit	S	Spike Recovery outside control limits
J	Analyte detected between SDL and RL	N	Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: ICV-120319	Batch ID: R59655	TestNo: SW8260C	Units: mg/L
SampType: ICV	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 9:03:00 AM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	0.0468	0.00100	0.0464	0	101	80	120			
1,1,1-Trichloroethane	0.0444	0.00100	0.0464	0	95.6	80	120			
1,1,2,2-Tetrachloroethane	0.0495	0.00100	0.0464	0	107	80	120			
1,1,2-Trichloroethane	0.0452	0.00100	0.0464	0	97.3	80	120			
1,1-Dichloroethane	0.0472	0.00100	0.0464	0	102	80	120			
1,1-Dichloroethene	0.0496	0.00100	0.0464	0	107	80	120			
1,1-Dichloropropene	0.0446	0.00100	0.0464	0	96.2	80	120			
1,2,3-Trichlorobenzene	0.0548	0.00500	0.0464	0	118	80	120			
1,2,3-Trichloropropane	0.0485	0.00100	0.0464	0	104	80	120			
1,2,4-Trichlorobenzene	0.0546	0.00500	0.0464	0	118	80	120			
1,2,4-Trimethylbenzene	0.0465	0.00500	0.0464	0	100	80	120			
1,2-Dibromo-3-chloropropane	0.0570	0.0100	0.0464	0	123	80	120			S
1,2-Dibromoethane	0.0463	0.00100	0.0464	0	99.7	80	120			
1,2-Dichlorobenzene	0.0454	0.00100	0.0464	0	97.8	80	120			
1,2-Dichloroethane	0.0432	0.00100	0.0464	0	93.1	80	120			
1,2-Dichloropropane	0.0447	0.00100	0.0464	0	96.3	80	120			
1,3,5-Trimethylbenzene	0.0456	0.00500	0.0464	0	98.2	80	120			
1,3-Dichlorobenzene	0.0438	0.00100	0.0464	0	94.4	80	120			
1,3-Dichloropropane	0.0464	0.00100	0.0464	0	100	80	120			
1,4-Dichloro-2-butene	0.0475	0.00200	0.0464	0	102	80	120			
1,4-Dichlorobenzene	0.0433	0.00100	0.0464	0	93.3	80	120			
2,2-Dichloropropane	0.0539	0.00100	0.0464	0	116	80	120			
2-Butanone	0.0492	0.0150	0.0464	0	106	80	120			
2-Chloroethylvinylether	0.0474	0.0150	0.0464	0	102	80	120			
2-Chlorotoluene	0.0448	0.00100	0.0464	0	96.6	80	120			
2-Hexanone	0.0506	0.0150	0.0464	0	109	80	120			
4-Chlorotoluene	0.0450	0.00100	0.0464	0	96.9	80	120			
4-Methyl-2-pentanone	0.0505	0.0150	0.0464	0	109	80	120			
Acetone	0.0582	0.0150	0.0464	0	125	80	120			S
Acrylonitrile	0.0928	0.00300	0.0928	0	100	60	140			
Benzene	0.0434	0.00100	0.0464	0	93.6	80	120			
Bromobenzene	0.0433	0.00100	0.0464	0	93.3	80	120			
Bromochloromethane	0.0422	0.00100	0.0464	0	91.0	80	120			
Bromodichloromethane	0.0450	0.00100	0.0464	0	97.0	80	120			
Bromoform	0.0478	0.00100	0.0464	0	103	80	120			
Bromomethane	0.0406	0.00100	0.0464	0	87.5	80	120			
Carbon disulfide	0.0437	0.0150	0.0464	0	94.1	80	120			
Carbon tetrachloride	0.0463	0.00100	0.0464	0	99.7	80	120			
Chlorobenzene	0.0428	0.00100	0.0464	0	92.3	80	120			
Chloroethane	0.0424	0.00100	0.0464	0	91.4	80	120			
Chloroform	0.0419	0.00100	0.0464	0	90.4	80	120			

Qualifiers:	B Analyte detected in the associated Method Blank	DF Dilution Factor	
	J Analyte detected between MDL and RL	MDL Method Detection Limit	
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits	
	RL Reporting Limit	S Spike Recovery outside control limits	
	J Analyte detected between SDL and RL	N Parameter not NELAC certified	

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: GCMS7_120319A

Sample ID: ICV-120319	Batch ID: R59655	TestNo: SW8260C	Units: mg/L
SampType: ICV	Run ID: GCMS7_120319A	Analysis Date: 3/19/2012 9:03:00 AM	Prep Date:

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloromethane	0.0456	0.00100	0.0464	0	98.4	80	120			
cis-1,2-Dichloroethene	0.0454	0.00100	0.0464	0	97.9	80	120			
cis-1,3-Dichloropropene	0.0458	0.00100	0.0464	0	98.6	80	120			
Dibromochloromethane	0.0468	0.00100	0.0464	0	101	80	120			
Dibromomethane	0.0428	0.00100	0.0464	0	92.2	80	120			
Dichlorodifluoromethane	0.0393	0.00100	0.0464	0	84.8	80	120			
Ethylbenzene	0.0429	0.00100	0.0464	0	92.5	80	120			
Iodomethane	0.0389	0.0150	0.0464	0	83.9	80	120			
Isopropylbenzene	0.0434	0.00100	0.0464	0	93.6	80	120			
m,p-Xylene	0.0867	0.00200	0.0928	0	93.4	80	120			
Methyl tert-butyl ether	0.0539	0.00100	0.0464	0	116	80	120			
Methylene chloride	0.0533	0.00250	0.0464	0	115	80	120			
n-Butylbenzene	0.0503	0.00100	0.0464	0	108	80	120			
n-Propylbenzene	0.0454	0.00100	0.0464	0	97.8	80	120			
o-Xylene	0.0435	0.00100	0.0464	0	93.8	80	120			
p-Isopropyltoluene	0.0453	0.00100	0.0464	0	97.6	80	120			
sec-Butylbenzene	0.0459	0.00100	0.0464	0	99.0	80	120			
Styrene	0.0413	0.00100	0.0464	0	89.0	80	120			
tert-Butylbenzene	0.0448	0.00100	0.0464	0	96.5	80	120			
Tetrachloroethene	0.0422	0.00200	0.0464	0	90.9	80	120			
Toluene	0.0417	0.00200	0.0464	0	89.9	80	120			
trans-1,2-Dichloroethene	0.0468	0.00100	0.0464	0	101	80	120			
trans-1,3-Dichloropropene	0.0463	0.00100	0.0464	0	99.8	80	120			
Trichloroethene	0.0418	0.00200	0.0464	0	90.2	80	120			
Trichlorofluoromethane	0.0413	0.00100	0.0464	0	89.0	80	120			
Vinyl chloride	0.0485	0.00100	0.0464	0	104	80	120			
Surr: 1,2-Dichloroethane-d4	195		200.0		97.7	70	120			
Surr: 4-Bromofluorobenzene	209		200.0		105	75	120			
Surr: Dibromofluoromethane	190		200.0		94.9	85	115			
Surr: Toluene-d8	203		200.0		101	85	120			

Qualifiers:	B Analyte detected in the associated Method Blank	DF Dilution Factor	
	J Analyte detected between MDL and RL	MDL Method Detection Limit	
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits	
	RL Reporting Limit	S Spike Recovery outside control limits	
	J Analyte detected between SDL and RL	N Parameter not NELAC certified	

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_120314A

The QC data in batch 50936 applies to the following samples: 1203116-01F, 1203116-02F, 1203116-05F, 1203116-06F, 1203116-07G, 1203116-08F

Sample ID: LCS-50936		Batch ID: 50936		TestNo: E300		Units: mg/L				
SampType: LCS		Run ID: IC2_120314A		Analysis Date: 3/14/2012 9:11:12 AM		Prep Date: 3/14/2012				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.70	1.00	10.00	0	97.0	90	110			
Sulfate	29.1	3.00	30.00	0	96.9	90	110			

Sample ID: LCSD-50936		Batch ID: 50936		TestNo: E300		Units: mg/L				
SampType: LCSD		Run ID: IC2_120314A		Analysis Date: 3/14/2012 9:25:46 AM		Prep Date: 3/14/2012				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.61	1.00	10.00	0	96.1	90	110	0.943	20	
Sulfate	29.1	3.00	30.00	0	97.1	90	110	0.248	20	

Sample ID: MB-50936		Batch ID: 50936		TestNo: E300		Units: mg/L				
SampType: MBLK		Run ID: IC2_120314A		Analysis Date: 3/14/2012 9:40:21 AM		Prep Date: 3/14/2012				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	<0.300	1.00								
Sulfate	<1.00	3.00								

Sample ID: 1203116-01F DUP		Batch ID: 50936		TestNo: E300		Units: mg/L				
SampType: DUP		Run ID: IC2_120314A		Analysis Date: 3/14/2012 10:50:30 AM		Prep Date: 3/14/2012				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	1110	100	0	1136				2.02	10	
Sulfate	6130	300	0	6192				1.03	10	

Sample ID: 1203116-01F MS		Batch ID: 50936		TestNo: E300		Units: mg/L				
SampType: MS		Run ID: IC2_120314A		Analysis Date: 3/14/2012 11:05:04 AM		Prep Date: 3/14/2012				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	1650	100	1000	681.5	96.9	90	110			
Sulfate	6660	300	3000	3715	98.2	90	110			

Sample ID: 1203116-01F MSD		Batch ID: 50936		TestNo: E300		Units: mg/L				
SampType: MSD		Run ID: IC2_120314A		Analysis Date: 3/14/2012 11:19:39 AM		Prep Date: 3/14/2012				
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	1650	100	1000	681.5	97.3	90	110	0.237	20	
Sulfate	6640	300	3000	3715	97.4	90	110	0.364	20	

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: IC2_120314A

Sample ID: ICV-120314	Batch ID: R59572	TestNo: E300	Units: mg/L							
SampType: ICV	Run ID: IC2_120314A	Analysis Date: 3/14/2012 8:52:25 AM	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	25.0	1.00	25.00	0	100	90	110			
Sulfate	75.0	3.00	75.00	0	100	90	110			

Sample ID: CCV1-120314	Batch ID: R59572	TestNo: E300	Units: mg/L							
SampType: CCV	Run ID: IC2_120314A	Analysis Date: 3/14/2012 12:13:14 PM	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.63	1.00	10.00	0	96.3	90	110			
Sulfate	29.3	3.00	30.00	0	97.8	90	110			

Sample ID: CCV2-120314	Batch ID: R59572	TestNo: E300	Units: mg/L							
SampType: CCV	Run ID: IC2_120314A	Analysis Date: 3/14/2012 12:59:28 PM	Prep Date:							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Chloride	9.64	1.00	10.00	0	96.4	90	110			
Sulfate	29.4	3.00	30.00	0	97.9	90	110			

<p>Qualifiers:</p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_120313A

The QC data in batch 50928 applies to the following samples: 1203116-01F, 1203116-02F, 1203116-05F, 1203116-06F, 1203116-07G, 1203116-08F

Sample ID: 1203116-01F DUP	Batch ID: 50928	TestNo: M4500-H+ B	Units: pH Units							
SampType: DUP	Run ID: TITRATOR_120313A	Analysis Date: 3/13/2012 1:29:00 PM	Prep Date: 3/13/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
pH	7.61	0	0	7.640				0.393	5	

Qualifiers:	B Analyte detected in the associated Method Blank J Analyte detected between MDL and RL ND Not Detected at the Method Detection Limit RL Reporting Limit J Analyte detected between SDL and RL	DF Dilution Factor MDL Method Detection Limit R RPD outside accepted control limits S Spike Recovery outside control limits N Parameter not NELAC certified
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_120313A

Sample ID: ICV-130313	Batch ID: R59551	TestNo: M4500-H+ B	Units: pH Units							
SampType: ICV	Run ID: TITRATOR_120313A	Analysis Date: 3/13/2012 1:25:00 PM	Prep Date: 3/13/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
pH	10.0	0	10.00	0	100	99	101			

Sample ID: CCV-120313	Batch ID: R59551	TestNo: M4500-H+ B	Units: pH Units							
SampType: CCV	Run ID: TITRATOR_120313A	Analysis Date: 3/13/2012 1:45:00 PM	Prep Date: 3/13/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
pH	7.01	0	7.000	0	100	97.1	102.9			

Qualifiers:	B Analyte detected in the associated Method Blank	DF Dilution Factor
	J Analyte detected between MDL and RL	MDL Method Detection Limit
	ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
	RL Reporting Limit	S Spike Recovery outside control limits
	J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_120313B

The QC data in batch 50938 applies to the following samples: 1203116-01F, 1203116-02F, 1203116-05F, 1203116-06F, 1203116-07G, 1203116-08F

Sample ID: LCS-50938	Batch ID: 50938	TestNo: M2320 B	Units: mg/L							
SampType: LCS	Run ID: TITRATOR_120313B	Analysis Date: 3/13/2012 2:09:00 PM	Prep Date: 3/13/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Total (As CaCO3)	52.5	20.0	50.00	0	105	74	129			

Sample ID: MB-50938	Batch ID: 50938	TestNo: M2320 B	Units: mg/L							
SampType: MBLK	Run ID: TITRATOR_120313B	Analysis Date: 3/13/2012 2:11:00 PM	Prep Date: 3/13/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0								
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0								
Alkalinity, Total (As CaCO3)	<10.0	20.0								

Sample ID: 1203116-01F DUP	Batch ID: 50938	TestNo: M2320 B	Units: mg/L							
SampType: DUP	Run ID: TITRATOR_120313B	Analysis Date: 3/13/2012 2:20:00 PM	Prep Date: 3/13/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	176	20.0	0	179.2				1.86	20	
Alkalinity, Carbonate (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0	0				0	20	
Alkalinity, Total (As CaCO3)	176	20.0	0	179.2				1.86	20	

Qualifiers:	<p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: TITRATOR_120313B

Sample ID: ICV-120313	Batch ID: R59560	TestNo: M2320 B	Units: mg/L
SampType: ICV	Run ID: TITRATOR_120313B	Analysis Date: 3/13/2012 2:05:00 PM	Prep Date: 3/13/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	6.64	20.0	0							
Alkalinity, Carbonate (As CaCO3)	95.5	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	102	20.0	100.0	0	102	98	102			

Sample ID: CCV1-120313	Batch ID: R59560	TestNo: M2320 B	Units: mg/L
SampType: CCV	Run ID: TITRATOR_120313B	Analysis Date: 3/13/2012 2:52:00 PM	Prep Date: 3/13/2012

Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Alkalinity, Bicarbonate (As CaCO3)	12.1	20.0	0							
Alkalinity, Carbonate (As CaCO3)	88.5	20.0	0							
Alkalinity, Hydroxide (As CaCO3)	<10.0	20.0	0							
Alkalinity, Total (As CaCO3)	101	20.0	100.0	0	101	90	110			

Qualifiers:

B Analyte detected in the associated Method Blank	DF Dilution Factor
J Analyte detected between MDL and RL	MDL Method Detection Limit
ND Not Detected at the Method Detection Limit	R RPD outside accepted control limits
RL Reporting Limit	S Spike Recovery outside control limits
J Analyte detected between SDL and RL	N Parameter not NELAC certified

CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_120314A

The QC data in batch 50940 applies to the following samples: 1203116-01C, 1203116-02C, 1203116-05C, 1203116-06C, 1203116-07C, 1203116-08C

Sample ID: LCS-50940	Batch ID: 50940	TestNo: M5310C	Units: mg/L							
SampType: LCS	Run ID: TOC_120314A	Analysis Date: 3/14/2012 9:37:00 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	10.1	1.00	10.00	0	101	80	120			

Sample ID: MB-50940	Batch ID: 50940	TestNo: M5310C	Units: mg/L							
SampType: MBLK	Run ID: TOC_120314A	Analysis Date: 3/14/2012 10:02:00 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	<0.300	1.00								

Sample ID: 1203088-01C MS	Batch ID: 50940	TestNo: M5310C	Units: mg/L							
SampType: MS	Run ID: TOC_120314A	Analysis Date: 3/14/2012 10:47:00 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	10.2	1.00	10.00	0.6609	95.7	80	120			

Sample ID: 1203088-01C MSD	Batch ID: 50940	TestNo: M5310C	Units: mg/L							
SampType: MSD	Run ID: TOC_120314A	Analysis Date: 3/14/2012 11:11:00 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	10.4	1.00	10.00	0.6609	97.7	80	120	1.92	15	

Qualifiers:	<p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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CLIENT: Zia Engineering & Environmental
Work Order: 1203116
Project: HELSTF Construction Landfill

ANALYTICAL QC SUMMARY REPORT

RunID: TOC_120314A

Sample ID: ICV-120314	Batch ID: R59575	TestNo: M5310C	Units: mg/L							
SampType: ICV	Run ID: TOC_120314A	Analysis Date: 3/14/2012 9:17:00 AM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	15.4	1.00	15.00	0	103	90	110			

Sample ID: CCV-120314	Batch ID: R59575	TestNo: M5310C	Units: mg/L							
SampType: CCV	Run ID: TOC_120314A	Analysis Date: 3/14/2012 2:23:00 PM	Prep Date: 3/14/2012							
Analyte	Result	RL	SPK value	Ref Val	%REC	LowLimit	HighLimit	%RPD	RPDLimit	Qual
Total Organic Carbon	10.1	1.00	10.00	0	101	80	120			

<p>Qualifiers:</p> <p>B Analyte detected in the associated Method Blank</p> <p>J Analyte detected between MDL and RL</p> <p>ND Not Detected at the Method Detection Limit</p> <p>RL Reporting Limit</p> <p>J Analyte detected between SDL and RL</p>	<p>DF Dilution Factor</p> <p>MDL Method Detection Limit</p> <p>R RPD outside accepted control limits</p> <p>S Spike Recovery outside control limits</p> <p>N Parameter not NELAC certified</p>
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Lab Order: 1203116
Client: Zia Engineering & Environmental
Project: HELSTF Construction Landfill

Sequence Report

Run ID: CETAC_HG_120110A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DCS-49792	----	SW7470A	49792		1/10/2012 11:07:21 AM	1/5/2012 8:53:35 AM	A

Lab Order: 1203116
Client: Zia Engineering & Environmental
Project: HELSTF Construction Landfill

Sequence Report

Run ID: CETAC_HG_120319A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120319	----	SW7470A	R59667	1	3/19/2012 1:48:13 PM		A
ICB-120319	----	SW7470A	R59667	1	3/19/2012 1:50:17 PM		A
MB-50979	----	SW7470A	50979	1	3/19/2012 1:56:23 PM	3/15/2012 1:37:40 PM	A
MB-50994	----	SW7470A	50994	1	3/19/2012 1:58:25 PM	3/16/2012 9:42:52 AM	A
Filter Blank-50994	----	SW7470A	50994	1	3/19/2012 2:00:28 PM	3/16/2012 9:42:52 AM	A
LCS-50979	----	SW7470A	50979	1	3/19/2012 2:06:35 PM	3/15/2012 1:37:40 PM	A
LCSD-50979	----	SW7470A	50979	1	3/19/2012 2:08:38 PM	3/15/2012 1:37:40 PM	A
LCS-50994	----	SW7470A	50994	1	3/19/2012 2:10:41 PM	3/16/2012 9:42:52 AM	A
CCV1-120319	----	SW7470A	R59667	1	3/19/2012 2:12:45 PM		A
CCB1-120319	----	SW7470A	R59667	1	3/19/2012 2:14:50 PM		A
LCSD-50994	----	SW7470A	50994	1	3/19/2012 2:38:11 PM	3/16/2012 9:42:52 AM	A
CCV2-120319	----	SW7470A	R59667	1	3/19/2012 2:40:16 PM		A
CCB2-120319	----	SW7470A	R59667	1	3/19/2012 2:42:21 PM		A
1203088-01D SD	----	SW7470A	50979	5	3/19/2012 3:00:56 PM	3/15/2012 1:37:40 PM	A
1203088-01D PDS	----	SW7470A	50979	1	3/19/2012 3:03:01 PM	3/15/2012 1:37:40 PM	A
CCV3-120319	----	SW7470A	R59667	1	3/19/2012 3:05:06 PM		A
CCB3-120319	----	SW7470A	R59667	1	3/19/2012 3:07:11 PM		A
1203088-01D MS	----	SW7470A	50979	1	3/19/2012 3:09:15 PM	3/15/2012 1:37:40 PM	A
1203088-01D MSD	----	SW7470A	50979	1	3/19/2012 3:11:19 PM	3/15/2012 1:37:40 PM	A
1203116-01D	HLSF-3839-HMW-035-0312	SW7470A	50979	1	3/19/2012 3:13:24 PM	3/15/2012 1:37:40 PM	A
1203116-02D	HLSF-3839-HMW-135-0312	SW7470A	50979	1	3/19/2012 3:15:29 PM	3/15/2012 1:37:40 PM	A
1203116-05D	HLSF-3839-HMW-034-0312	SW7470A	50979	1	3/19/2012 3:17:34 PM	3/15/2012 1:37:40 PM	A
1203116-06D	HLSF-3839-HMW-059-0312	SW7470A	50979	1	3/19/2012 3:19:38 PM	3/15/2012 1:37:40 PM	A
1203116-07D	HLSF-3839-RB-001-0312	SW7470A	50979	1	3/19/2012 3:21:43 PM	3/15/2012 1:37:40 PM	E
1203116-08D	HLSF-3839-HMW-032-0312	SW7470A	50979	1	3/19/2012 3:23:48 PM	3/15/2012 1:37:40 PM	A
1203088-01E SD	----	SW7470A	50994	5	3/19/2012 3:27:58 PM	3/16/2012 9:42:52 AM	A
CCV4-120319	----	SW7470A	R59667	1	3/19/2012 3:30:03 PM		A
CCB4-120319	----	SW7470A	R59667	1	3/19/2012 3:32:08 PM		A
1203088-01E PDS	----	SW7470A	50994	1	3/19/2012 3:34:13 PM	3/16/2012 9:42:52 AM	A
1203088-01E MS	----	SW7470A	50994	1	3/19/2012 3:36:17 PM	3/16/2012 9:42:52 AM	A
1203088-01E MSD	----	SW7470A	50994	1	3/19/2012 3:38:23 PM	3/16/2012 9:42:52 AM	A
1203116-01E	HLSF-3839-HMW-035-0312	SW7470A	50994	1	3/19/2012 3:40:28 PM	3/16/2012 9:42:52 AM	A
1203116-02E	HLSF-3839-HMW-135-0312	SW7470A	50994	1	3/19/2012 3:42:34 PM	3/16/2012 9:42:52 AM	A
1203116-05E	HLSF-3839-HMW-034-0312	SW7470A	50994	1	3/19/2012 3:44:39 PM	3/16/2012 9:42:52 AM	A
1203116-06E	HLSF-3839-HMW-059-0312	SW7470A	50994	1	3/19/2012 3:46:44 PM	3/16/2012 9:42:52 AM	A
1203116-07E	HLSF-3839-RB-001-0312	SW7470A	50994	1	3/19/2012 3:48:50 PM	3/16/2012 9:42:52 AM	E
1203116-08E	HLSF-3839-HMW-032-0312	SW7470A	50994	1	3/19/2012 3:50:56 PM	3/16/2012 9:42:52 AM	A
CCV5-120319	----	SW7470A	R59667	1	3/19/2012 3:53:01 PM		A

Lab Order: 1203116
Client: Zia Engineering & Environmental
Project: HELSTF Construction Landfill

Sequence Report

CCB5-120319 ----- SW7470A R59667 1 3/19/2012 3:55:06 PM A

Run ID: GC15_120112A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DCS-49873	-----	M8015D	49873		1/12/2012 12:13:05 PM	1/12/2012 9:26:00 AM	A

Run ID: GC15_120318A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120318	-----	M8015D	R59651	1	3/18/2012 9:34:23 AM		A
LCS-50939	-----	M8015D	50939	1	3/18/2012 9:46:54 AM	3/14/2012 9:24:50 AM	A
LCS-50976	-----	M8015D	50976	1	3/18/2012 9:55:41 AM	3/15/2012 1:10:04 PM	A
MB-50939	-----	M8015D	50939	1	3/18/2012 10:13:15 AM	3/14/2012 9:24:50 AM	A
1203088-01HMS	-----	M8015D	50939	1	3/18/2012 10:30:49 AM	3/14/2012 9:24:50 AM	A
1203088-01HMSD	-----	M8015D	50939	1	3/18/2012 10:39:35 AM	3/14/2012 9:24:50 AM	A
1203116-01H	HLSF-3839-HMW-035-0312	M8015D	50939	1	3/18/2012 10:48:21 AM	3/14/2012 9:24:50 AM	A
1203116-02H	HLSF-3839-HMW-135-0312	M8015D	50939	1	3/18/2012 10:57:08 AM	3/14/2012 9:24:50 AM	A
1203116-05H	HLSF-3839-HMW-034-0312	M8015D	50939	1	3/18/2012 11:05:53 AM	3/14/2012 9:24:50 AM	A
1203116-06H	HLSF-3839-HMW-059-0312	M8015D	50939	1	3/18/2012 11:14:39 AM	3/14/2012 9:24:50 AM	A
CCV1-120318	-----	M8015D	R59651	1	3/18/2012 11:23:24 AM		A
MB-50976	-----	M8015D	50976	1	3/18/2012 11:40:55 AM	3/15/2012 1:10:04 PM	A
1203116-08H	HLSF-3839-HMW-032-0312	M8015D	50939	1	3/18/2012 11:49:40 AM	3/14/2012 9:24:50 AM	A
1203126-05EMS	-----	M8015D	50939	1	3/18/2012 12:33:38 PM	3/14/2012 11:39:00 AM	A
1203126-05EMSD	-----	M8015D	50939	1	3/18/2012 12:42:24 PM	3/14/2012 11:39:00 AM	A
1203116-07I	HLSF-3839-RB-001-0312	M8015D	50976	1	3/18/2012 12:51:10 PM	3/15/2012 1:10:04 PM	E
CCV2-120318	-----	M8015D	R59651	1	3/18/2012 1:08:43 PM		A
1203146-02DMS	-----	M8015D	50976	1	3/18/2012 1:52:30 PM	3/15/2012 1:10:04 PM	A
1203146-02DMSD	-----	M8015D	50976	1	3/18/2012 2:01:15 PM	3/15/2012 1:10:04 PM	A
CCV3-120318	-----	M8015D	R59651	1	3/18/2012 2:53:59 PM		A

Run ID: GC4_120308A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DCS-50845	-----	M8015V	50845		3/8/2012 1:01:40 PM	3/8/2012 9:01:35 AM	A
	-----	M8015V	50845		3/8/2012 1:01:40 PM	3/8/2012 9:01:35 AM	A

Lab Order: 1203116
Client: Zia Engineering & Environmental
Project: HELSTF Construction Landfill

Sequence Report

Run ID: GC4_120316A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120316	----	M8015V	R59634	1	3/16/2012 10:45:16 AM		A
LCS-50997	----	M8015V	50997	1	3/16/2012 11:11:25 AM	3/16/2012 9:49:28 AM	A
MB-50997	----	M8015V	50997	1	3/16/2012 12:01:29 PM	3/16/2012 9:49:28 AM	A
1203116-01B	HLSF-3839-HMW-035-0312	M8015V	50997	1	3/16/2012 12:27:04 PM	3/16/2012 9:49:28 AM	A
1203116-02B	HLSF-3839-HMW-135-0312	M8015V	50997	1	3/16/2012 12:52:43 PM	3/16/2012 9:49:28 AM	A
1203116-05B	HLSF-3839-HMW-034-0312	M8015V	50997	1	3/16/2012 1:17:14 PM	3/16/2012 9:49:28 AM	A
1203116-06B	HLSF-3839-HMW-059-0312	M8015V	50997	1	3/16/2012 1:42:51 PM	3/16/2012 9:49:28 AM	A
1203116-07B	HLSF-3839-RB-001-0312	M8015V	50997	1	3/16/2012 2:08:02 PM	3/16/2012 9:49:28 AM	E
1203116-08B	HLSF-3839-HMW-032-0312	M8015V	50997	1	3/16/2012 2:33:33 PM	3/16/2012 9:49:28 AM	A
1203088-01BMS	----	M8015V	50997	1	3/16/2012 3:23:51 PM	3/16/2012 9:49:28 AM	A
1203088-01BMSD	----	M8015V	50997	1	3/16/2012 3:50:02 PM	3/16/2012 9:49:28 AM	A
CCV1-120316	----	M8015V	R59634	1	3/16/2012 4:14:51 PM		A

Run ID: GCMS7_120309C

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DCS-50932	----	SW8260C	50932		3/9/2012 4:21:00 PM	3/9/2012 9:00:00 AM	A
DCS2-50932	----	SW8260C	50932		3/9/2012 4:45:00 PM	3/9/2012 9:00:00 AM	A
DCS3-50932	----	SW8260C	50932		3/9/2012 5:10:00 PM	3/9/2012 9:00:00 AM	A
DCS4-50932	----	SW8260C	50932		3/9/2012 5:35:00 PM	3/9/2012 9:00:00 AM	A

Run ID: GCMS7_120319A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120319	----	SW8260C	R59655	1	3/19/2012 9:03:00 AM		A
LCS-51020	----	SW8260C	51020	1	3/19/2012 9:52:00 AM	3/19/2012 9:09:50 AM	A
MB-51020	----	SW8260C	51020	1	3/19/2012 10:17:00 AM	3/19/2012 9:09:50 AM	A
1203126-05AMS	----	SW8260C	51020	1	3/19/2012 12:44:00 PM	3/19/2012 9:09:50 AM	A
1203126-05AMSD	----	SW8260C	51020	1	3/19/2012 1:08:00 PM	3/19/2012 9:09:50 AM	A
1203116-01A	HLSF-3839-HMW-035-0312	SW8260C	51020	1	3/19/2012 1:33:00 PM	3/19/2012 9:09:50 AM	A
1203116-02A	HLSF-3839-HMW-135-0312	SW8260C	51020	1	3/19/2012 1:57:00 PM	3/19/2012 9:09:50 AM	A
1203116-03A	HLSF-3839-HMW-TB-1-0312	SW8260C	51020	1	3/19/2012 2:22:00 PM	3/19/2012 9:09:50 AM	T
1203116-04A	HLSF-3839-HMW-TB-2-0312	SW8260C	51020	1	3/19/2012 2:46:00 PM	3/19/2012 9:09:50 AM	T
1203116-05A	HLSF-3839-HMW-034-0312	SW8260C	51020	1	3/19/2012 3:11:00 PM	3/19/2012 9:09:50 AM	A
1203116-06A	HLSF-3839-HMW-059-0312	SW8260C	51020	1	3/19/2012 3:35:00 PM	3/19/2012 9:09:50 AM	A
1203116-07A	HLSF-3839-RB-001-0312	SW8260C	51020	1	3/19/2012 4:00:00 PM	3/19/2012 9:09:50 AM	E
1203116-08A	HLSF-3839-HMW-032-0312	SW8260C	51020	1	3/19/2012 4:24:00 PM	3/19/2012 9:09:50 AM	A
1203116-09A	HLSF-3839-HMW-TB3-0312	SW8260C	51020	1	3/19/2012 4:49:00 PM	3/19/2012 9:09:50 AM	T

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

Sequence Report

Run ID: GCMS9_120318A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DFTPP2-120318	----	SW8270C	R59643	1	3/18/2012 10:10:00 PM		A
ICV2-120319	----	SW8270C	R59643	1	3/18/2012 11:15:00 PM		A
DCS1-50926	----	SW8270C	50926		3/18/2012 11:38:00 PM	3/13/2012 2:19:35 PM	A
LCS-50965	----	SW8270C	50965	1	3/19/2012 12:47:00 AM	3/15/2012 9:10:47 AM	A
LCSD-50965	----	SW8270C	50965	1	3/19/2012 1:10:00 AM	3/15/2012 9:10:47 AM	A
MB-50965	----	SW8270C	50965	1	3/19/2012 4:37:00 AM	3/15/2012 9:10:47 AM	A
1203116-01G	HLSF-3839-HMW-035-0312	SW8270C	50965	1	3/19/2012 7:41:00 AM	3/15/2012 9:10:47 AM	A
1203116-02G	HLSF-3839-HMW-135-0312	SW8270C	50965	1	3/19/2012 8:04:00 AM	3/15/2012 9:10:47 AM	A
1203116-05G	HLSF-3839-HMW-034-0312	SW8270C	50965	1	3/19/2012 8:27:00 AM	3/15/2012 9:10:47 AM	A
1203116-06G	HLSF-3839-HMW-059-0312	SW8270C	50965	1	3/19/2012 8:51:00 AM	3/15/2012 9:10:47 AM	A
1203116-07H	HLSF-3839-RB-001-0312	SW8270C	50965	1	3/19/2012 9:14:00 AM	3/15/2012 9:10:47 AM	E
1203116-08G	HLSF-3839-HMW-032-0312	SW8270C	50965	1	3/19/2012 9:37:00 AM	3/15/2012 9:10:47 AM	A

Run ID: GCMS9_120318B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DFTPP-120318	----	SW8270C	R59691	1	3/18/2012 9:52:00 AM		A
ICV-120318	----	SW8270C	R59691	1	3/18/2012 10:11:00 AM		A
LCS-50965	----	SW8270C	50965	1	3/18/2012 10:59:00 AM	3/15/2012 9:10:47 AM	A
LCSD-50965	----	SW8270C	50965	1	3/18/2012 11:23:00 AM	3/15/2012 9:10:47 AM	A
MB-50965	----	SW8270C	50965	1	3/18/2012 1:17:00 PM	3/15/2012 9:10:47 AM	A
1203116-01G	HLSF-3839-HMW-035-0312	SW8270C	50965	1	3/18/2012 1:40:00 PM	3/15/2012 9:10:47 AM	A
1203116-02G	HLSF-3839-HMW-135-0312	SW8270C	50965	1	3/18/2012 2:03:00 PM	3/15/2012 9:10:47 AM	A
1203116-05G	HLSF-3839-HMW-034-0312	SW8270C	50965	1	3/18/2012 2:26:00 PM	3/15/2012 9:10:47 AM	A
1203116-06G	HLSF-3839-HMW-059-0312	SW8270C	50965	1	3/18/2012 2:49:00 PM	3/15/2012 9:10:47 AM	A
1203116-07H	HLSF-3839-RB-001-0312	SW8270C	50965	1	3/18/2012 3:12:00 PM	3/15/2012 9:10:47 AM	E
1203116-08G	HLSF-3839-HMW-032-0312	SW8270C	50965	1	3/18/2012 3:35:00 PM	3/15/2012 9:10:47 AM	A

Run ID: IC2_120103A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DCS-49774	----	E300	49774		1/3/2012 9:34:27 AM	1/3/2012 8:30:00 AM	A

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

Sequence Report

Run ID: IC2_120314A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120314	----	E300	R59572	1	3/14/2012 8:52:25 AM		A
LCS-50936	----	E300	50936	1	3/14/2012 9:11:12 AM	3/14/2012 8:54:33 AM	A
LCSD-50936	----	E300	50936	1	3/14/2012 9:25:46 AM	3/14/2012 8:54:33 AM	A
MB-50936	----	E300	50936	1	3/14/2012 9:40:21 AM	3/14/2012 8:54:33 AM	A
1203116-07G	HLSF-3839-RB-001-0312	E300	50936	1	3/14/2012 9:56:00 AM	3/14/2012 8:54:33 AM	E
1203116-01F	HLSF-3839-HMW-035-0312	E300	50936	100	3/14/2012 10:35:55 AM	3/14/2012 8:54:33 AM	A
1203116-01F DUP	HLSF-3839-HMW-035-0312PD9	E300	50936	100	3/14/2012 10:50:30 AM	3/14/2012 8:54:33 AM	A
1203116-01F MS	HLSF-3839-HMW-035-0312MS	E300	50936	100	3/14/2012 11:05:04 AM	3/14/2012 8:54:33 AM	A
1203116-01F MSD	HLSF-3839-HMW-035-	E300	50936	100	3/14/2012 11:19:39 AM	3/14/2012 8:54:33 AM	A
1203116-02F	HLSF-3839-HMW-135-0312	E300	50936	100	3/14/2012 11:34:13 AM	3/14/2012 8:54:33 AM	A
1203116-05F	HLSF-3839-HMW-034-0312	E300	50936	100	3/14/2012 11:48:47 AM	3/14/2012 8:54:33 AM	A
CCV1-120314	----	E300	R59572	1	3/14/2012 12:13:14 PM		A
1203116-06F	HLSF-3839-HMW-059-0312	E300	50936	100	3/14/2012 12:28:52 PM	3/14/2012 8:54:33 AM	A
1203116-08F	HLSF-3839-HMW-032-0312	E300	50936	100	3/14/2012 12:43:26 PM	3/14/2012 8:54:33 AM	A
CCV2-120314	----	E300	R59572	1	3/14/2012 12:59:28 PM		A

Run ID: ICP-MS2_120130B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DCS-50009-1	----	SW6020	50009		1/30/2012 12:17:00 PM	1/20/2012 10:57:43 AM	A
DCS-50009-3	----	SW6020	50009		1/30/2012 12:23:00 PM	1/20/2012 10:57:43 AM	A
DCS-50009-4	----	SW6020	50009		1/30/2012 12:29:00 PM	1/20/2012 10:57:43 AM	A
DCS-50009-2	----	SW6020	50009		1/30/2012 12:35:00 PM	1/20/2012 10:57:43 AM	A

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

Sequence Report

Run ID: ICP-MS2_120319B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
BLANK STD 1	----	SW6020	R59662	1	3/19/2012 4:19:00 PM		A
1 & 20ppb std 2	----	SW6020	R59662	1	3/19/2012 4:25:00 PM		A
10 & 200ppb std 3	----	SW6020	R59662	1	3/19/2012 4:31:00 PM		A
250 & 5000ppb std 4	----	SW6020	R59662	1	3/19/2012 4:37:00 PM		A
500 & 10000ppb std 5	----	SW6020	R59662	1	3/19/2012 4:42:00 PM		A
2000 ppb std 6	----	SW6020	R59662	1	3/19/2012 4:48:00 PM		A
ICSA-120319	----	SW6020	R59662	1	3/19/2012 5:05:00 PM		A
ICSAB-120319	----	SW6020	R59662	1	3/19/2012 5:11:00 PM		A
ICV2-120319	----	SW6020	R59662	1	3/19/2012 5:41:00 PM		A
ICB2-120319	----	SW6020	R59662	1	3/19/2012 5:59:00 PM		A
MB-50958	----	SW6020	50958	1	3/19/2012 6:05:00 PM	3/15/2012 8:32:12 AM	A
LCS-50958	----	SW6020	50958	1	3/19/2012 6:11:00 PM	3/15/2012 8:32:12 AM	A
LCSD-50958	----	SW6020	50958	1	3/19/2012 6:16:00 PM	3/15/2012 8:32:12 AM	A
1203088-01D SD	----	SW6020	50958	5	3/19/2012 6:34:00 PM	3/15/2012 8:32:12 AM	A
1203116-01D	HLSF-3839-HMW-035-0312	SW6020	50958	1	3/19/2012 6:40:00 PM	3/15/2012 8:32:12 AM	A
1203116-02D	HLSF-3839-HMW-135-0312	SW6020	50958	1	3/19/2012 6:45:00 PM	3/15/2012 8:32:12 AM	A
1203116-05D	HLSF-3839-HMW-034-0312	SW6020	50958	1	3/19/2012 6:51:00 PM	3/15/2012 8:32:12 AM	A
1203116-06D	HLSF-3839-HMW-059-0312	SW6020	50958	1	3/19/2012 6:57:00 PM	3/15/2012 8:32:12 AM	A
1203116-07D	HLSF-3839-RB-001-0312	SW6020	50958	1	3/19/2012 7:03:00 PM	3/15/2012 8:32:12 AM	E
1203116-08D	HLSF-3839-HMW-032-0312	SW6020	50958	1	3/19/2012 7:09:00 PM	3/15/2012 8:32:12 AM	A
1203088-01D PDS	----	SW6020	50958	1	3/19/2012 7:15:00 PM	3/15/2012 8:32:12 AM	A
1203088-01D MS	----	SW6020	50958	1	3/19/2012 7:20:00 PM	3/15/2012 8:32:12 AM	A
1203088-01D MSD	----	SW6020	50958	1	3/19/2012 7:26:00 PM	3/15/2012 8:32:12 AM	A
CCV3-120319	----	SW6020	R59662	1	3/19/2012 7:38:00 PM		A
CCB3-120319	----	SW6020	R59662	1	3/19/2012 8:07:00 PM		A

Lab Order: 1203116
Client: Zia Engineering & Environmental
Project: HELSTF Construction Landfill

Sequence Report

Run ID: ICP-MS2_120321B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
BLANK STD 1	----	SW6020	R59716	1	3/21/2012 11:20:00 AM		A
1 & 20ppb std 2	----	SW6020	R59716	1	3/21/2012 11:26:00 AM		A
10 & 200ppb std 3	----	SW6020	R59716	1	3/21/2012 11:32:00 AM		A
250 & 5000ppb std 4	----	SW6020	R59716	1	3/21/2012 11:38:00 AM		A
500 & 10000ppb std 5	----	SW6020	R59716	1	3/21/2012 11:44:00 AM		A
2000 ppb std 6	----	SW6020	R59716	1	3/21/2012 11:50:00 AM		A
ICSA-120321	----	SW6020	R59716	1	3/21/2012 12:07:00 PM		A
ICSAB-120321	----	SW6020	R59716	1	3/21/2012 12:13:00 PM		A
ICV1-120321	----	SW6020	R59716	1	3/21/2012 12:31:00 PM		A
ICB1-120321	----	SW6020	R59716	1	3/21/2012 12:37:00 PM		A
CCV1-120321	----	SW6020	R59716	1	3/21/2012 2:54:00 PM		A
CCB1-120321	----	SW6020	R59716	1	3/21/2012 3:12:00 PM		A
1203116-07D	HLSF-3839-RB-001-0312	SW6020	50958	1	3/21/2012 3:18:00 PM	3/15/2012 8:32:12 AM	E
1203116-07E	HLSF-3839-RB-001-0312	SW6020	50959	1	3/21/2012 3:24:00 PM	3/15/2012 8:33:29 AM	E
1203116-01D	HLSF-3839-HMW-035-0312	SW6020	50958	100	3/21/2012 3:30:00 PM	3/15/2012 8:32:12 AM	A
1203116-02D	HLSF-3839-HMW-135-0312	SW6020	50958	100	3/21/2012 3:36:00 PM	3/15/2012 8:32:12 AM	A
1203116-05D	HLSF-3839-HMW-034-0312	SW6020	50958	200	3/21/2012 3:42:00 PM	3/15/2012 8:32:12 AM	A
1203116-06D	HLSF-3839-HMW-059-0312	SW6020	50958	200	3/21/2012 3:48:00 PM	3/15/2012 8:32:12 AM	A
1203116-08D	HLSF-3839-HMW-032-0312	SW6020	50958	200	3/21/2012 3:54:00 PM	3/15/2012 8:32:12 AM	A
1203116-01E	HLSF-3839-HMW-035-0312	SW6020	50959	100	3/21/2012 4:00:00 PM	3/15/2012 8:33:29 AM	A
1203116-02E	HLSF-3839-HMW-135-0312	SW6020	50959	100	3/21/2012 4:06:00 PM	3/15/2012 8:33:29 AM	A
CCV2-120321	----	SW6020	R59716	1	3/21/2012 4:18:00 PM		A
CCB2-120321	----	SW6020	R59716	1	3/21/2012 4:47:00 PM		A
1203116-06E	HLSF-3839-HMW-059-0312	SW6020	50959	200	3/21/2012 4:53:00 PM	3/15/2012 8:33:29 AM	A
1203116-08E	HLSF-3839-HMW-032-0312	SW6020	50959	200	3/21/2012 4:59:00 PM	3/15/2012 8:33:29 AM	A
CCV3-120321	----	SW6020	R59716	1	3/21/2012 5:05:00 PM		A
CCB3-120321	----	SW6020	R59716	1	3/21/2012 5:35:00 PM		A

Run ID: ICP-MS3_120210A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DCS-50009-1	----	SW6020	50009		2/10/2012 1:21:00 PM	1/20/2012 10:57:43 AM	A
DCS-50009-3	----	SW6020	50009		2/10/2012 1:26:00 PM	1/20/2012 10:57:43 AM	A
DCS-50009-2	----	SW6020	50009		2/10/2012 1:38:00 PM	1/20/2012 10:57:43 AM	A

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

Sequence Report

Run ID: ICP-MS3_120319B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
BLANK STD 1	----	SW6020	R59657	1	3/19/2012 10:42:00 AM		A
1/20 ppb STD.	----	SW6020	R59657	1	3/19/2012 10:48:00 AM		A
10/200 ppb STD.	----	SW6020	R59657	1	3/19/2012 10:54:00 AM		A
250/5000 ppb STD.	----	SW6020	R59657	1	3/19/2012 11:00:00 AM		A
500/10000 ppb STD.	----	SW6020	R59657	1	3/19/2012 11:05:00 AM		A
2000/25000 ppb ST	----	SW6020	R59657	1	3/19/2012 11:11:00 AM		A
ICSA-120319	----	SW6020	R59657	1	3/19/2012 11:27:00 AM		A
ICSAB-120319	----	SW6020	R59657	1	3/19/2012 11:33:00 AM		A
ICV1-120319	----	SW6020	R59657	1	3/19/2012 11:50:00 AM		A
ICB1-120319	----	SW6020	R59657	1	3/19/2012 12:12:00 PM		A
CCV1-120319	----	SW6020	R59657	1	3/19/2012 1:55:00 PM		A
CCB1-120319	----	SW6020	R59657	1	3/19/2012 2:19:00 PM		A
MB-50959	----	SW6020	50959	1	3/19/2012 2:24:00 PM	3/15/2012 8:33:29 AM	A
Filter Blank-50959	----	SW6020	50959	1	3/19/2012 2:30:00 PM	3/15/2012 8:33:29 AM	A
LCS-50959	----	SW6020	50959	1	3/19/2012 2:36:00 PM	3/15/2012 8:33:29 AM	A
LCSD-50959	----	SW6020	50959	1	3/19/2012 2:41:00 PM	3/15/2012 8:33:29 AM	A
1203088-01E SD	----	SW6020	50959	5	3/19/2012 2:58:00 PM	3/15/2012 8:33:29 AM	A
1203116-01E	HLSF-3839-HMW-035-0312	SW6020	50959	1	3/19/2012 3:04:00 PM	3/15/2012 8:33:29 AM	A
1203116-02E	HLSF-3839-HMW-135-0312	SW6020	50959	1	3/19/2012 3:09:00 PM	3/15/2012 8:33:29 AM	A
1203116-06E	HLSF-3839-HMW-059-0312	SW6020	50959	1	3/19/2012 3:20:00 PM	3/15/2012 8:33:29 AM	A
1203116-07E	HLSF-3839-RB-001-0312	SW6020	50959	1	3/19/2012 3:26:00 PM	3/15/2012 8:33:29 AM	E
1203116-08E	HLSF-3839-HMW-032-0312	SW6020	50959	1	3/19/2012 3:32:00 PM	3/15/2012 8:33:29 AM	A
1203088-01E PDS	----	SW6020	50959	1	3/19/2012 3:37:00 PM	3/15/2012 8:33:29 AM	A
1203088-01E MS	----	SW6020	50959	1	3/19/2012 3:43:00 PM	3/15/2012 8:33:29 AM	A
1203088-01E MSD	----	SW6020	50959	1	3/19/2012 3:49:00 PM	3/15/2012 8:33:29 AM	A
1203116-05E	HLSF-3839-HMW-034-0312	SW6020	50959	1	3/19/2012 4:00:00 PM	3/15/2012 8:33:29 AM	A
CCV2-120319	----	SW6020	R59657	1	3/19/2012 4:06:00 PM		A
CCB2-120319	----	SW6020	R59657	1	3/19/2012 4:34:00 PM		A

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

Sequence Report

Run ID: ICP-MS3_120320B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
BLANK STD 1	----	SW6020	R59686	1	3/20/2012 10:39:00 AM		A
1/20 ppb STD.	----	SW6020	R59686	1	3/20/2012 10:45:00 AM		A
10/200 ppb STD.	----	SW6020	R59686	1	3/20/2012 10:50:00 AM		A
250/5000 ppb STD.	----	SW6020	R59686	1	3/20/2012 10:56:00 AM		A
500/10000 ppb STD.	----	SW6020	R59686	1	3/20/2012 11:02:00 AM		A
2000/25000 ppb ST	----	SW6020	R59686	1	3/20/2012 11:07:00 AM		A
ICSA-120320	----	SW6020	R59686	1	3/20/2012 11:24:00 AM		A
ICSAB-120320	----	SW6020	R59686	1	3/20/2012 11:29:00 AM		A
ICV1-120320	----	SW6020	R59686	1	3/20/2012 11:46:00 AM		A
ICB1-120320	----	SW6020	R59686	1	3/20/2012 12:07:00 PM		A
CCV1-120320	----	SW6020	R59686	1	3/20/2012 1:25:00 PM		A
CCB1-120320	----	SW6020	R59686	1	3/20/2012 1:51:00 PM		A
MB-50958	----	SW6020	50958	1	3/20/2012 1:57:00 PM	3/15/2012 8:32:12 AM	A
MB-50959	----	SW6020	50959	1	3/20/2012 2:02:00 PM	3/15/2012 8:33:29 AM	A
Filter Blank-50959	----	SW6020	50959	1	3/20/2012 2:08:00 PM	3/15/2012 8:33:29 AM	A
LCS-50958	----	SW6020	50958	1	3/20/2012 2:14:00 PM	3/15/2012 8:32:12 AM	A
LCSD-50958	----	SW6020	50958	1	3/20/2012 2:19:00 PM	3/15/2012 8:32:12 AM	A
LCS-50959	----	SW6020	50959	1	3/20/2012 2:25:00 PM	3/15/2012 8:33:29 AM	A
LCSD-50959	----	SW6020	50959	1	3/20/2012 2:30:00 PM	3/15/2012 8:33:29 AM	A
1203088-01D SD	----	SW6020	50958	1000	3/20/2012 2:47:00 PM	3/15/2012 8:32:12 AM	A
1203088-01E SD	----	SW6020	50959	1000	3/20/2012 2:59:00 PM	3/15/2012 8:33:29 AM	A
1203088-01D PDS	----	SW6020	50958	200	3/20/2012 3:21:00 PM	3/15/2012 8:32:12 AM	A
1203088-01E PDS	----	SW6020	50959	200	3/20/2012 3:27:00 PM	3/15/2012 8:33:29 AM	A
1203088-01D MS	----	SW6020	50958	200	3/20/2012 3:32:00 PM	3/15/2012 8:32:12 AM	A
1203088-01D MSD	----	SW6020	50958	200	3/20/2012 3:38:00 PM	3/15/2012 8:32:12 AM	A
1203088-01E MS	----	SW6020	50959	200	3/20/2012 3:44:00 PM	3/15/2012 8:33:29 AM	A
1203088-01E MSD	----	SW6020	50959	200	3/20/2012 3:49:00 PM	3/15/2012 8:33:29 AM	A
CCV2-120320	----	SW6020	R59686	1	3/20/2012 3:55:00 PM		A
CCB2-120320	----	SW6020	R59686	1	3/20/2012 4:09:00 PM		A

Lab Order: 1203116
Client: Zia Engineering & Environmental
Project: HELSTF Construction Landfill

Sequence Report

Run ID: ICP-MS3_120322B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
BLANK STD 1	----	SW6020	R59728	1	3/22/2012 10:25:00 AM		A
1/20 ppb STD.	----	SW6020	R59728	1	3/22/2012 10:31:00 AM		A
10/200 ppb STD.	----	SW6020	R59728	1	3/22/2012 10:37:00 AM		A
250/5000 ppb STD.	----	SW6020	R59728	1	3/22/2012 10:42:00 AM		A
500/10000 ppb STD.	----	SW6020	R59728	1	3/22/2012 10:48:00 AM		A
2000/25000 ppb ST	----	SW6020	R59728	1	3/22/2012 10:53:00 AM		A
ICSAB-120322	----	SW6020	R59728	1	3/22/2012 11:16:00 AM		A
ICSA-120322	----	SW6020	R59728	1	3/22/2012 11:49:00 AM		A
ICV1-120322	----	SW6020	R59728	1	3/22/2012 12:06:00 PM		A
ICB1-120322	----	SW6020	R59728	1	3/22/2012 12:24:00 PM		A
1203116-01E	HLSF-3839-HMW-035-0312	SW6020	50959	100	3/22/2012 1:03:00 PM	3/15/2012 8:33:29 AM	A
1203116-02E	HLSF-3839-HMW-135-0312	SW6020	50959	100	3/22/2012 1:09:00 PM	3/15/2012 8:33:29 AM	A
1203116-05D	HLSF-3839-HMW-034-0312	SW6020	50958	200	3/22/2012 1:15:00 PM	3/15/2012 8:32:12 AM	A
1203116-06D	HLSF-3839-HMW-059-0312	SW6020	50958	200	3/22/2012 1:20:00 PM	3/15/2012 8:32:12 AM	A
1203116-05E	HLSF-3839-HMW-034-0312	SW6020	50959	200	3/22/2012 1:26:00 PM	3/15/2012 8:33:29 AM	A
1203116-06E	HLSF-3839-HMW-059-0312	SW6020	50959	200	3/22/2012 1:32:00 PM	3/15/2012 8:33:29 AM	A
1203116-08E	HLSF-3839-HMW-032-0312	SW6020	50959	200	3/22/2012 1:37:00 PM	3/15/2012 8:33:29 AM	A
1203116-08D	HLSF-3839-HMW-032-0312	SW6020	50958	200	3/22/2012 1:43:00 PM	3/15/2012 8:32:12 AM	A
CCV1-120322	----	SW6020	R59728	1	3/22/2012 2:39:00 PM		A
CCB1-120322	----	SW6020	R59728	1	3/22/2012 2:57:00 PM		A

Run ID: TITRATOR_120313A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV2-120313	----	M4500-H+ B	R59551	1	3/13/2012 1:22:00 PM	3/13/2012 1:22:00 PM	A
ICV1-120313	----	M4500-H+ B	R59551	1	3/13/2012 1:23:00 PM	3/13/2012 1:23:00 PM	A
ICV-130313	----	M4500-H+ B	R59551	1	3/13/2012 1:25:00 PM	3/13/2012 1:25:00 PM	A
1203116-01F	HLSF-3839-HMW-035-0312	M4500-H+ B	50928	1	3/13/2012 1:26:00 PM	3/13/2012 1:00:00 PM	A
1203116-01F DUP	HLSF-3839-HMW-035-0312PD9	M4500-H+ B	50928	1	3/13/2012 1:29:00 PM	3/13/2012 1:00:00 PM	A
1203116-02F	HLSF-3839-HMW-135-0312	M4500-H+ B	50928	1	3/13/2012 1:32:00 PM	3/13/2012 1:00:00 PM	A
1203116-05F	HLSF-3839-HMW-034-0312	M4500-H+ B	50928	1	3/13/2012 1:35:00 PM	3/13/2012 1:00:00 PM	A
1203116-06F	HLSF-3839-HMW-059-0312	M4500-H+ B	50928	1	3/13/2012 1:37:00 PM	3/13/2012 1:00:00 PM	A
1203116-07G	HLSF-3839-RB-001-0312	M4500-H+ B	50928	1	3/13/2012 1:40:00 PM	3/13/2012 1:00:00 PM	E
1203116-08F	HLSF-3839-HMW-032-0312	M4500-H+ B	50928	1	3/13/2012 1:43:00 PM	3/13/2012 1:00:00 PM	A
CCV-120313	----	M4500-H+ B	R59551	1	3/13/2012 1:45:00 PM	3/13/2012 1:45:00 PM	A

Lab Order: 1203116
 Client: Zia Engineering & Environmental
 Project: HELSTF Construction Landfill

Sequence Report

Run ID: TITRATOR_120313B

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120313	----	M2320 B	R59560	1	3/13/2012 2:05:00 PM	3/13/2012 2:05:00 PM	A
LCS-50938	----	M2320 B	50938	1	3/13/2012 2:09:00 PM	3/13/2012 1:45:00 PM	A
MB-50938	----	M2320 B	50938	1	3/13/2012 2:11:00 PM	3/13/2012 1:45:00 PM	A
1203116-01F	HLSF-3839-HMW-035-0312	M2320 B	50938	1	3/13/2012 2:16:00 PM	3/13/2012 1:45:00 PM	A
1203116-01F DUP	HLSF-3839-HMW-035-0312PD9	M2320 B	50938	1	3/13/2012 2:20:00 PM	3/13/2012 1:45:00 PM	A
1203116-02F	HLSF-3839-HMW-135-0312	M2320 B	50938	1	3/13/2012 2:25:00 PM	3/13/2012 1:45:00 PM	A
1203116-05F	HLSF-3839-HMW-034-0312	M2320 B	50938	1	3/13/2012 2:30:00 PM	3/13/2012 1:45:00 PM	A
1203116-06F	HLSF-3839-HMW-059-0312	M2320 B	50938	1	3/13/2012 2:35:00 PM	3/13/2012 1:45:00 PM	A
1203116-07G	HLSF-3839-RB-001-0312	M2320 B	50938	1	3/13/2012 2:37:00 PM	3/13/2012 1:45:00 PM	E
1203116-08F	HLSF-3839-HMW-032-0312	M2320 B	50938	1	3/13/2012 2:39:00 PM	3/13/2012 1:45:00 PM	A
CCV1-120313	----	M2320 B	R59560	1	3/13/2012 2:52:00 PM	3/13/2012 2:52:00 PM	A

Run ID: TOC_120118A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
DCS-49949	----	M5310C	49949		1/18/2012 1:44:00 PM	1/18/2012 8:30:00 AM	A

Run ID: TOC_120314A

Sample ID	Client Sample ID	Test Number	Batch ID	Dilution	Analysis Date	Prep Date	Matrix
ICV-120314	----	M5310C	R59575	1	3/14/2012 9:17:00 AM	3/14/2012 8:30:00 AM	A
LCS-50940	----	M5310C	50940	1	3/14/2012 9:37:00 AM	3/14/2012 8:30:00 AM	A
MB-50940	----	M5310C	50940	1	3/14/2012 10:02:00 AM	3/14/2012 8:30:00 AM	A
1203088-01C MS	----	M5310C	50940	1	3/14/2012 10:47:00 AM	3/14/2012 8:30:00 AM	A
1203088-01C MSD	----	M5310C	50940	1	3/14/2012 11:11:00 AM	3/14/2012 8:30:00 AM	A
1203116-01C	HLSF-3839-HMW-035-0312	M5310C	50940	1	3/14/2012 11:32:00 AM	3/14/2012 8:30:00 AM	A
1203116-02C	HLSF-3839-HMW-135-0312	M5310C	50940	1	3/14/2012 11:54:00 AM	3/14/2012 8:30:00 AM	A
1203116-05C	HLSF-3839-HMW-034-0312	M5310C	50940	1	3/14/2012 12:15:00 PM	3/14/2012 8:30:00 AM	A
1203116-06C	HLSF-3839-HMW-059-0312	M5310C	50940	1	3/14/2012 12:36:00 PM	3/14/2012 8:30:00 AM	A
1203116-07C	HLSF-3839-RB-001-0312	M5310C	50940	1	3/14/2012 12:55:00 PM	3/14/2012 8:30:00 AM	E
1203116-08C	HLSF-3839-HMW-032-0312	M5310C	50940	1	3/14/2012 1:17:00 PM	3/14/2012 8:30:00 AM	A
CCV-120314	----	M5310C	R59575	1	3/14/2012 2:23:00 PM	3/14/2012 8:30:00 AM	A

Manual Integrations Tracking Form - DoD QSM 4.2 Requirement

Instrument ID: GCMS#7

ICAL: GCMS7_120117W.CAL

Data Folder: GCMS7_120319A

<u>Sample ID</u> ICAL, ICV, and CCV QC and Field Samples	<u>Analyte #1</u> Identification & Reason	<u>Analyte #2</u> Identification & Reason	<u>Analyte #3</u> Identification & Reason	<u>Analyte #4</u> Identification & Reason
ICV-120319	Bromomethane – did not integrate entire peak.	Chloroethane – did not integrate entire peak.		
LCS-51020	Bromomethane – did not integrate entire peak.	Chloroethane – did not integrate entire peak.		
1203126-05AMS	Bromomethane – did not integrate entire peak.	Chloroethane – did not integrate entire peak.		
1203126-05AMSD	Bromomethane – did not integrate entire peak.			

*Manually Integrated = MI

Karyn Lane
Analyst

3-20-12
Date

Evelyn...
2nd Level Review

3/22/2012

Date

Manual Integrations Tracking Form - DoD QSM 4.2 Requirement

Instrument ID: GCMS9

Data Folder: GCMS9 120318A

<u>Sample ID</u> ICAL, ICV, and CCV QC and Field Samples	<u>Analyte #1</u> Identification & Reason	<u>Analyte #2</u> Identification & Reason	<u>Analyte #3</u> Identification & Reason	<u>Analyte #4</u> Identification & Reason
LCS-50902	MI for dimethylphenethylamine because peak was partially integrated.			
LCS-50965	MI for dimethylphenethylamine because peak was partially integrated.			
LCSD-50965	MI for dimethylphenethylamine because peak was partially integrated.			
1203043-01GMS	MI for dimethylphenethylamine because peak was partially integrated.			
1203043-01GMSD	MI for dimethylphenethylamine because peak was partially integrated.			
1203088-01GMS	MI for dimethylphenethylamine because peak was not integrated.			
1203088-01GMSD	MI for dimethylphenethylamine because peak was partially integrated.			

*Manually Integrated = MI



Analyst

3/19/2012

Date



2nd Level Review

Date